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—、 Chief development history of insect drugs

The cognition of insect drugs undergoes thousands of years. Our ancestry ate animal meat without being cooked, ate birds and other animals if lived in the mountain, and ate fish, turtle, spiral shell and clam if lived near rivers or seas (“*gu shi kao*”) when they struggled against the nature for live. Eating many kinds of animals, it is natural for them to meet some animals that have medical actions. With the accumulation of experiences, they began to cognize the animal drugs gradually. It is inevitable.

It is “*shen nong ben cao jing*” that summarizes the medical functions of insect drugs in the existent medical literatures. It lists and discusses 28 kinds of insect drugs, which is 8% of all drugs it mentions and 43% of animal drugs. This shows that doctors emphasized insect drugs a lot in early years of Han Dynasty, and also shows that they already have inquired valuable experience. Doctor *Zhang Zhongjing* used insect drugs to treat diseases of internal medicine and gynecology in East Han Dynasty. He listed his experiences of using *shi zhi*, *meng chong*, *qiang long*, *shu fu*, *zhe chong*, *zhi zhu*, *feng fang*, *qi cao*, etc. in “*shang han za bing lun*”, and also created some famous formulas, such as *di dang tang*, *bie jia jian wan*, *da huang zhe chong wan*, *xia yu xue tang*, which mainly contain insect drugs and bring tremendous influence to later ages..

From then on, insect drugs developed in very dynasty. In East Jin Dynasty, doctor *Ge Hong* (“*zhou hou fang*”) used *qiu yin* to treat jaundice (*lu huang*), used *jiang can* and *zha chan* to treat headache and wind vertigo. In Tang Dynasty, doctor *Sun Simiao* (“*qian jin fang*”) and doctor *Wang Tao* (“*wai tai mi yao*”) used insect drugs to treat diseases of internal medicine, surgery, gynecology and pediatrics widely. Besides the drugs which doctor *Zhang Zhongjing* used, they also used *xi yi*, *wu gong*, *yuan qing*, *ban mao*, *ying chong*, etc.. In Song Dynasty, doctor *Xu Shuwei* (“*ben shi fang*”) used insect drugs quite often. In Jin and Yuan Dynasty, application of insect drugs also developed a lot. In Ming Dynasty, doctor *Li Shizhen*, a great pharmacist, summarized therapeutic experiences of drugs. “*Ben cao gang mu*” records 107 kinds of insect drugs, which is 24% of animal drugs (444 kinds), and promotes the development of insect drugs a lot. In Qing Dynasty, doctors of warm diseases, such as *Yang Lishan*, *Ye Tianshi*, *Wang Meng ying*, etc., had the

courage to innovate and used insect drugs to treat diseases widely, and left lots of valuable experiences to later ages. In the recent decades of years, they are doctor *Zhang Cunxi*, doctor *Hun Tiejiao* and doctor *Zhang Cigong* who are good at using insect drugs and whose experiences are quite original.

After the PRC was established, medical circle pays great attention to the clinical application and research of insect drugs. Insect drugs are used to treat diseases of internal medicine and surgery, and also to treat cancer (Initial effect has been achieved in some fields.). It breaks a new path for insect drugs and promotes the development of applicative range and experience.

二、 Functions of insect drugs

The functions of insect drugs usually vary due to compatibility of medicine. Generally speaking, they can be summarized into ten aspects.

1. Attacking hardness and breaking obstruction This method is suitable for hardness and mass formation, such as viscera tumor, swelling liver and spleen, etc., due to pathological changes of organs. For example, *zhe chong*, *qiang lang*, *feng fang*, *shu fu*, etc. in *bie jia jian wan* are used to treat *nve mu* (swelling liver and spleen due to long-playing malaria); *quan xie*, *wu gong*, *ban mao*, etc. are used to treat cancer nowadays.

2. Activating blood and dispersing stasis This method can be used to remove stale things and produce new things for blood stasis due to obstructed blood circulation or disorder of metabolism. For example, *shui zhi*, *meng chong*, etc. in *di dang tang* are used to treat mania due to external stasis heat of febrile diseases; *zhe chong* in *da huang zhe chong wan* and *xia yu xue tang* is used to treat stasis due to trauma or abdominal pain and amenorrhea due to stasis.

3. Stopping wind and tranquilizing convulsion This method is suitable for liver wind resulting in series of symptoms of nerve system, such as coma, spasm and so on. For example, *xie wei*, *wu xiao she*, etc. in *da qing gao* are used to treat convulsion (coma, spasm); *quan xie*, *wu gong*, etc. in *zhi jing san* are used to treat acute and chronic convulsion, such as coma and spasm due to encephalitis B and epidemic cerebrospinal meningitis.

4. Dispersing wind and reducing heat This method can be used to clear heat, resolve toxin and lead pathogenic factors out for stagnation of pathogenic heat in exterior in the early stage of febrile diseases, manifesting as fever, unsmooth appearance of anthema. For example, *jiang can*, *chan yi*, etc. in *sheng jiang san* are used to treat warm heat diseases; *chan yi* in *xiao feng san* are used to treat urticaria due to wind heat.

5. Searching wind and reducing toxin This method is suitable for leprosy and arthritis. For example, *wu xiao she*, *jiang can*, *quan xie*, etc. in *ku shen wan* and *sou feng san* are use to treat leprosy; doctor *Xu Shuwei* used *quan xie*, *di long*, etc. in *she xiang yuan* to treat pain due to acute migratory arthritis; doctor *Ye Tianshi* used *qiang long*, *quan xie*, *di long* and *feng fang* to treat Bi syndrome.

6. Promoting *qi* circulation and regulating blood This method is suitable for

abdominal distension pain due to *qi* stagnation and blood stasis. For example, *jiu xiang chong* in *wu long wan* are used to relieve pain due to *qi* stagnation of liver and stomach; “*sun shi ji xiao fang*”, “*sheng hui fang*” and doctor *Wang Mengying* used *qiang lang chong* to treat dysphagia, constipation and vomiting stool.

7. Tonifying *yang* and supplementing kidney This method is suitable for kidney *yang* deficiency, manifesting as impotence, enuresis, incontinence of urine. For example, *hua zhi zhu* and *feng fang* in *zhi feng wan* are used to treat impotence and enuresis.

8. Eliminating carbuncle and subsiding swelling This method is suitable for carbuncle, malignant furuncle and obstinate ulcer due to obstruction of toxic pathogens. For example, *yan you* in “*jiu ji fang*” is used to treat rotten ulcer in shank; *ban mao* in “*zhi zhi fang*” is used to draw toxin in carbuncle and furuncle.

10. Supplementing root *Shen gen san* can warm kidney and descend *qi* to treat root for deficient asthma due to deficiency of lung and kidney. *Sang piao xiao* and *hai ma* can be used to treat impotence, enuresis and incontinence of urine due to kidney *yang* deficiency.

Ten aspects of functions mentioned above are not unique for insect drugs. Other herbs have these actions too. However, these functions of insect drugs usually are better, more reliable and more effective. Every insect drug has its own advantages, but many drugs have multiple functions. For example, *zhe chong* and *qiang lang chong* can attack hardness and break obstruction, also can activate blood and disperse stasis; *wu gong* and *quan xie* can stop wind and tranquilize convulsion, and also resolve toxin and treat carbuncle.

What should be paid attention to is right syndrome differentiation, correct drugs, suitable compatibility of medicines and course of treatment when insect drugs are used. Doctors should be cautious when strong toxic drugs, such as *ban mao* and *chan su*, are selected, and master the rules that pathogenic factors are defeated without impairment of healthy *qi* and effect should be quick but not fierce in order to avoid side effects.

三、 Methods for broadening applications of insect drugs

Insect drugs have special advantages. It is said that there are 1,500,000 kinds of animals and 300,000 kinds of plants in the world we have known. Among the animals, there are insects about 80%. Because of high biological activity of insect drugs, they are more effective than normal plant drugs. It does not mean that we look down upon plant drugs, but just advocate proper combination use of insect and plant drugs to promote the therapeutic effect. For example, *wu gong* can treat impotence, and the therapeutic effect would be more obvious if it is used with *dang gui*, *bai shao* and *gan cao*, or with related drugs according to syndrome differentiation. Because our country is wide, there are plenty of natural animal resources. We should do experiments and researches further, and collect and use them more widely.

I think there are four methods to broaden the applications of insect drugs.

1. Making the past serve present, extending and developing the functions
Due to the restriction of era and its conditions, functions of many drugs were not exposed thoroughly. There are many potential functions left to be exposed. It is one method that inheriting and developing the experiences of ancient doctors, and extending the functions according to ancient literatures.

Wu gong is a good example. The functions of stopping wind, tranquilizing convulsion, resolving toxin and eliminating carbuncle are already written in ancient books. Only one book named "*ming yi bie lu*" mentioned that it can induce abortion and disperse stasis. We acquire therapeutic effect when it is used to treat ectopic pregnancy (oosperm is still alive). The function of treating impotence, which is not mentioned in ancient book, is found when it is used to treat lung tuberculosis and bone tuberculosis. During the process of treatment, it is found that the sexual function is enhanced. So the doctor uses it to treat impotence and then good therapeutic effect occurs.

Feng fang is another good example. It can disperse wind, tranquilize convulsion, attack toxin, treat ulcer, eliminate swelling and relieve pain. Only "*tang ben cao*" mentions that it can warm *yang* and supplement kidney to treat impotence. In clinical practice, some inpatients said that it seems to warm kidney and tonify *yang* when it is used to treat chronic bronchitis. Then impotence is mainly treated by *feng fang*, and the therapeutic effect is quite good.

Using this method, I think we will find more new functions.

2. Practising and researching to excavate new drugs There are functions of many insect drugs needed to be researched and excavated by practice. For example, gelatin made from scorpion can nourish blood and *yin* powerfully for lung tuberculosis and thrombocytopenia. The protein in *can yong* is 2-3 times more than meat, and it contains many kinds of essential amino acid. So it is a good drug for infantile malnutrition and chronic diseases. Many pharmonic books, including "*ben jing*", mentions that the snake can be used as drugs. They mention that the body, gallbladder, skin of the snake can be used. No one mentions snake poison. Snake poison is an anticoagulant agent and pain-killer, and it contains enzyme and polypeptide. Thrombin-like enzyme is extracted from snake poison of pallas pitviper by foreigners, and is better than other anticoagulant agents when it is used to treat venous embolism. Pharmic scientists of our country make pallas pitviper anticoagulant enzyme from pallas pitviper poison. Animal experiments and clinical observations show that it is a good drug for obliterated cerebral vascular and cardiovascular diseases. The analgesic action of "*ke tong nin*" injection made from cobra poison is more powerful than morphine and the action lasts long. Additionally, it is found that there is a kind of protein with antibacterial activity by experimental researches. It possesses powerful activity for killing bacterium. It is a promising antibiotic that it can kill many kinds of bacterium and virus with 1/10000 concentration.

3. Reforming forms to facilitate application The fishy smell of some insect drugs and their strange shapes are not acceptable. Patients usually detest

and fear them and do not like to take them. Therefore, it is very necessary to reform the forms of insect drugs. The insect drugs can be made into pill, tablet, capsule or injection forms by sifting and refining. It not only saves medicinal materials and promotes therapeutic affect, but also make intake, store and transport conveniently. At present, injections of *di long*, *quan xie*, *chan chu*, *wu gong* and *shou gong* and demethylcantharidin tablets have been made in our country. *Li Jiansheng*, a doctor of Beijing *wu ke song* clinic, suggests using fresh animal drugs, and he cooperates with bioscience and technology department of Tsinghua University. The experiments about basic biochemistry, pharmacodynamics and toxicology show that their contents, such as active substances, microelements, amino acid and so on, are more, or even thousands of times, than traditional dry drugs. “*Fu zheng dang xie*” freeze-dry capsule invented by the doctor are used to treat 197 critical patients in later period of cancer with total effective rate 96.94%, systemic lupus erythematosus (SLE) with 96.42%. This kind of new preparation not only keeps characters of traditional drugs, but also absorbs achievements of modern science and technology. It is an innovation and breakthrough, and is worth referring and spreading.

4. Being fostered by man to pledge drug resource In order to pledge drug resource, some drugs which is in short supply, such as *ge jie*, *dong chong xia cao* and so on, can be fostered by man. Many districts are artificially breeding such drugs as *tu bie chong*, *quan xie*, *wu gong*, *she*, etc. to meet the need.

In a word, we consider that insect drugs will develop through the cooperation, research, discussion, practice and application by medical and pharmacy circles and boffin of related interdisciplines.

四、Clinic use of insect drugs

1. *Quan Xie* (scorpion)

Quan xie is the body of *Buthus martensi* Karsch, also called *quan chong*. Its tail is called *xie wei*. It is produced in Shandong province, Hebei province, Henan province and so on. It is pungent in flavor, mild in nature, slight toxic and attributive to liver meridian.

Functions: (1) dispersing wind and tranquilizing spasm: It is good at treating vertigo due to wind and spasm due to convulsion. It is common used to treat spasm due to infantile high fever, mouth and eye distortion and hemiplegia after wind stroke, high blood pressure and body tremble due to internal wind, epilepsy and tetanus. (2): going into tendon and bone: It is good at going into tendon and bone to eliminate dampness, disperse wind, and dredge obstruction and collaterals. It can be used to treat Bi syndrome due to wind dampness with good therapeutic effect. (3): dispersing blood stasis and resolving toxin: Because it can break obstruction of *qi* and blood, resolve toxin and treat ulcer and mass, it once was used to treat obstinate carbuncle and malignant ulcer. Extending from this, now it is used to treat cancer, tuberculosis, thromboangitis obliterans.

Scorpion venom is a kind of toxic protein which contains such elements as

C, H, O, N, S, etc.. The chemical natures and pharmacological actions are similar to neurotoxins of snake venom, paralyzing respiration center. Pharmacological researches show that *quan xie* and *wu gong* has sedative actions and can inhibit the convulsion caused by Strychnine Nitrate, pure nicotine and Pentetrazole. It also can inhibit vascular movement center, expand vessels, inhibit heart directly and resist the pressor action of epinephrine to reduce blood pressure. Additionally, it has antalgic action. These researches explain the ancient practical experiences scientifically and make us realize the value of medical inheritance of our country. We should work hard to develop and improve it.

Xie wei is more powerful than *quan xie*. Powder for oral administration is more powerful than decoction. Salt content should be rinsed by water, then the body it is insolated or baked into dry form. The dose should be small at the beginning, 1-3 trips of *xie wei*, or 2-3g of *quan xie*. They are grinded into powder for oral administration, and half dose is taken every time. Usually long-term administration will not result in toxic reactions. For example, a bone tuberculosis patient was cured after taking *quan xie* for 2 years continuously without any discomfort. However, it should be used with supplementing drugs for weak patient. The clinical applications are discussed as follows.

1) Migraine: There are many causes of migraine, but it always is related to hyperactivity of liver *yang* and upper disturbance of live wind. Migraine often breaks out during climate changes, hard work or emotion changes. The manifestations are headache, vertigo, vomiting, aversion to light and disturbance, and fatigue. The patient is unable to work during the outbreak. Long-term disease or frequent outbreak also can affect intellect and eyesight. Some cases are very obstinate, and normal drugs do not have any therapeutic effect at all. But empirical formula named "*gou xie san*" can acquire good therapeutic effect. *Quan xie* is good at dispersing wind, suppressing liver, relieving spasm and pain, and is used as chief drugs; *gou teng* is good at clearing heart heat, stopping liver wind, and is used as assistant drug; long-term pain is usually due to deficiency, so *zi he che* is used to nourish *qi* and blood, supplement liver and kidney. The formula gives consideration to both root and branch. The components of "*gou xie san*" are *zhi quan xie*, *tou teng*, *di long*, *zi he che*. Every drug is 9g, grinded into powder, and parceled into ten. One parcel is taken every time, twice per day. Usually the therapeutic effect occurs after 1-2 days. After pain is relieved, one parcel take every day or two days to consolidate the effect; or a little powder of *quan xie* is fixed at *tai yang* acupoint, and changed every two days. This method also can relieve the headache due to cancer transferring into brain.

[case] patient *Zhang*, female, 40, electrician. She suffered left migraine for 4 years, with sever headache, vomiting, and even coma when it breaks out. It was diagnosed as angioneurotic headache by Shanghai *hua shan* hospital. She was treated by western medicine (ergotamine, caffeine, etc.) and TCM herbs without any effect. Thin and greasy tongue coating, slight red tongue,

and thin and wiry pulse are due to deficiency of liver and kidney and upper disturbance of liver yang, so the treatment methods are suppressing liver, stopping liver wind, assisted by nourishing yin. 10 parcels of *gou xie san*, 1 parcel every time, twice per day, and administrated by tea of *shi hu* 9g and *gou qi* 9g. The headache was relieve gradually, and disappeared 2 days later. Later on, the patient took 1 parcel per day. After 10 parcels were finished, *qi ju di huang wan* was administrated to consolidate the effect. Follow-up visit after 3 years showed no recurrence.

2) Tetanus: It is called clonic convulsion after metal injuries (*jin chuang chi zong*) and spasm after metal injuries (*jin chuang jing*) in traumatology, tetanus neonatorium (*qi feng*) in newborn baby, and puerperal tetanus (*chan hou feng*) in lying-in woman. There many formulas mainly contain *quan xie* for this disease. The formula we use as follows can obviously relieve or even cure the disease, which manifests as locked jaw, opisthotonos, spasm, twitch, and even coma. Formula is: *xie wei* 4 trips, *wu gong* 1 trips, *fang feng* 9g, *tian ma* 12g, grinded into powder. Powder can be used to brush teeth or blowed into nose for locked jaw. After locked jaw is relieved, the patient is poured by 6g of drug powder with old wine. If necessary, the powder can be administrated continuously.

[case] patient *Xi*, female, 35, farmer. Six days ago, her foot was pierced and bleeding was stopped by pressing with earth when she was working. This morning, she felt unsmooth open and close of jaw, then difficult speech, dysphagia, stiff neck and back, and spasm of limbs. Tongue coating was thin and greasy, and pulse was wiry and tense. It is due to disturbance of toxic wind and twitch of tendons. The treatment methods are suppressing liver, stopping wind, resolve toxin and tranquilizing spasm. Powder of 1 formula was used to brush teeth. After locked jaw was relieved a little, the patient was poured by 6g drug powder with old wine. After 2 hours later, spam and stiff neck were relieved a little. Then the powder was administrated again, the condition gradually becomes better. The patient was cured after drugs regulation.

3) Acute and chronic convulsion: Acute and chronic convulsion contains many diseases, but the acute convulsion we mentioned here is epidemic encephalitis B, chronic is tubercular meningitis. There are many formulas which use insect drugs to treat convulsion in ancient china, such as "*er ke zun sheng*" uses *xie wei* in *da qing gao*, "*shen shi zun sheng shu*" uses *quan xie* and *wu gong* in *jie feng dan*, "*wai tai mi yao*" also uses insect drugs to treat spasm diseases.

(1) Besides drugs according syndrome differentiation, *zhi jing san* can relieve twitching due to wind in epidemic encephalitis B with high fever without any side effect. *Zhi quan xie*, *zhi wu gong*, *zhi jiang can* and *ming tian ma* (or replaced by *guang di long*) are grinded into powder with the same dose. Administration is 1-2g very time, 2-3 times per day. It can stop wind and tranquilize convulsion to relieve spasm.

(2) *Duo tan ding jing san* can be used for fastigium of epidemic encephalitis B due to *qi* obstruction, and phlegm and turbidity clouding heart, manifesting as high fever, coma, frequent convulsion, abundant accumulation of phlegm and drool, sputum rales like rasp of saw, thick and greasy tongue coating, and tendency of internal obstruction and external collapse. *Zhi quan xie* 30, *ba dou shuang* 0.5g, *xi huang* 1g, *zhu sha* 1.5g, *xiong jing* 2g, *dan xing* 6g, *chuan bei* 3g, *tian zhu huang* 3g, *yuan cun* 0.3g (mixed later) are grinded into powder and sealed off. Administration is 0.6g every time, 0.3g for children, once or twice per day. 3-4 hours later, the patient would discharge black stool with yellow and white mucus (another administration for no stool). That is indications of disappearance of phlegm and resuscitation. This formula has obvious functions of stopping wine, eliminating phlegm, promoting defecating and eliminating turbidity. It can treat sputum rales like rasp of saw of pneumonia, toxic bacillary dysentery, brain disease due to pertussis and poliomyelitis due to obstruction of phlegm and turbidity, also can eliminates turbid sputum to void asphyxia.

(3) The followed formula can promote resuscitation of some tubercular meningitis patients. But drugs according syndrome differentiation and combination methods of TCM and western medicine are still necessary. *Quan xie* 8, *wu gong* 2 trips, *shou gong* 2 trips, *fei xiong huang* 3g, *jiang can* 3g, *fei zhu sha* 3g and *zhang nao* 3g are grinded into powder, and then mixed with honey to cover fontanel and navel with gauze. The drugs are changed every day. Usually the patient will discharge stool with rugitus after 3-4 hours later.

[case] patient *Yan*, male, 6. He suffered epidemic encephalitis B for 6 days, high fever, convulsion, spasm of limbs, deep coma, sputum rales like rasp of saw, tendency to asphyxia, yellow, greasy and turbid tongue coating, slippery and rapid pulse. It is due to heat phlegm going into pericardium to confuse clear orifice, liver wind, obstruction of lung and stagnation of phlegm. Besides routine treatments, *du tan ding jing san* 0.6g was given through nose. About four hours later, much mucus stool was discharge out, sputum rales disappeared suddenly and resuscitated gradually. The patient was cured after regulation.

4) Lymphnoditis: *quan xie* not only is good at stopping wind, tranquilizing convulsion, but also can eliminate phlegm, disperse stasis, resolve toxin and treat obstinate furuncle and malignant ulcer. Doctor *Zhang Zhikang*, a famous dead surgeon of Wuxi city, uses *xu tan wan* to treat *yin* furuncle and flowing phlegm (usually they are cold abscess, bone tuberculosis and scrofula) with good therapeutic effect. This pill contains *quan xie*, *wu gong*, *ban mao* and *pao shan jia*. This fully proves the function of treating ulcer. There are many formulas which treat lymphnoditis mainly by *quan xie*. Assisted by *wu gong*, the functions of resolving toxin and eliminating hardness are more powerful. The author uses these two formulas quite often.

(1) *Xiao li san*: *quan xie* 20, *zhi wu gong* 10 trips, *chuan shan jia* 20 pieces, *huo xiao* 1g, *he tao* 10 (without shell). They are grinded into powder. 4.5g

powder is taken with old wine every night (reduced dose for weak body or children). Usually the therapeutic effect occurs after half month, no matter whether the lymphoditis is ulceration nor not. Later on, the powder is taken once every two days until it is cured.

It is introduced by “clinical formulas selections of TCM herbs” that modified *xiao li san* is used to treat cervical scrofula by people’s hospital of Gaoyou county. *He tao* of *xiao li san* is knocked off, and *jiang can*, *shou gong* and *bai fu zi* are added. These drugs are grinded into powder and filled into capsules. The administration is 2-3 capsules every time, three times per day. 11-15 days constitute one course. Dose is reduced for children and weak patient, and pregnant woman is forbid. If the focus is ulceration, the drugs can be used for external use to accelerate the speed of closing up. More than 40 cases of cervical scrofula are treated with cure rate 90%, and without recurrence. Two cases of bone tuberculosis are treated with obvious reduced erythrocyte sedimentation rate (ESR) and lessened focus (proved by X ray). It is referencable.

(2) *Dan quan xie* 7.5g and *yuan cun* 0.7g are grinded into powder, and pilled into five chicken eggs through the small holes made in the head of eggs. Then eggs are sealed by cotton paper or rubberized fabric, and then roasted in fire ash until is cooked. One egg is taken with old wine every evening. At the same time, every nodule is treated by moxibustion with three moxa-cones per day. It is repeated every five days and for three times continuously. This is an effective method for lymphoditis and phlegm nodules without ulceration

[case] patient *Zheng*, male, 25, cadre. Lymphoditis results from qi stagnation, phlegm obstruction or tuberculosis. The patient has a history of lung tuberculosis. Last year, he became weaker due to over-work. There was a nodule in the left neck, about the size of broad bean at first, and then as big as chicken egg. The nodule was hard, can be moved and pain with pressure. Later on, two nodules occurred in right neck. He was treated by streptomycin and isorriazid without any therapeutic effect. Because he was afraid of the pain of external treatment, he asked for medicine. After taking *xiao li san* for one week, pain was relieved. Two weeks later, left nodule became a little smaller and can be moved, and the right nodules became much smaller. Then drug was taken once every two days. After 45 days, the nodules disappeared.

5) *Lou jing chuang*; It just is *lou yan nong xue* in “*yin hai jing wei*”. This is a common disease in ophthalmology department, similar to acute period of chronic dacryocystitis. It is usually caused by liver heat and stagnation of wind and dampness. Without being cured right away, it usually festers into saccus lacrimalis fistula. Because *quan xie* not only suppress liver and stop wind, but also resolve toxin and eliminate carbuncle, it can treat this disease affectively. Usually the swelling and pain would be relieved after 2-3 days’ treatment. *Zhi quan xie* is grinded into powder, and 1.5 g of powder is taken with water twice per day. Dose is reduced for children.

[case] patient *Wang*, female, 49, farmer. *Lou jing chuang* usually is caused by wind-heat toxin, resulting in swelling, pain, even ulceration and pus. She suffered this disease for several years and it recurred frequently. Tongue coating was thin and yellow, and pulse was wiry and rapid. The treatment methods are suppressing liver, stop wind, resolve toxin and eliminate carbuncle. 1.5g of *quan xie* powder was taken twice very days. After taking drugs, pain was relieved at that night, and swelling was relieved next day. She was cured after regulation.

6) Flowing fire: It is erysipeloid of legs, often caused by obstruction of liver fire and dampness-heat in skin, induced by tired and cold, and is quite obstinate. It can be treated by *xie jia san*. *Sheng quan xie 30g* and *pao shan jia 45g* are grinded into powder. 4.5g of powder is taken once a day. The dose is reduced for children, women and weak patient. Pregnant woman is forbid. Coldness and fever usually can be relieved after taking drug once, then local swelling and pain and nodules in groin disappear gradually or cured after taking drug for three days.

Comment: The main reason for so quick therapeutic effect is that *quan xie* is good at resolving toxin and eliminating carbuncle, and is assisted by *chuan shan jia*, which can disperse wind, dredge collateral, disperse stasis, eliminate swelling, resolve toxin and attack hardness. So it can treat flowing fire (the causes includes filariasis) affectively.

[case] patient *Xue*, male, 51, worker. He suffered flowing fire of left foot for more than ten years. It recurred frequently, and very recurrence lasted more than 10 days. Gradually, muscle of left leg and ankle became like spargosis. The disease was reduced usually by over-work or coldness. The manifestation were aversion cold, high fever, headache, fatigue, redness, swelling and pain of left foot, scorching hot sensation, tumescent lymph nodes (lymphadenectasis) in groin, difficulty in walking, slight yellow tongue coating, and slippery and rapid pulse. Filariasis was found in his blood once. The drugs mentioned above were prescribed to him. Cold and heat disappeared and the patient can fall sleep after taking drugs for one day, pain disappeared and red swelling was relieved after two days, and nearly cured after three days.

Comment: Associated clinic of *mo gan shan* community uses *xie jia ling ji tang*^① (*quan xie 4g* which is grinded into powder for deglutition, *chuan shan jia 9g*, *zhu ling 9g*, *han fang ji 9g*, *niu xi 9g*, *hai tong pi 12g*, *gui wei 12g*, *sheng mi ren 2g*) to treat flowing fire. Not only can symptoms be relieved, but also can recurrence be controlled. The patient is once treated by penicillin, hetrazan and carbarson, which do not control its recurrence. After taking drugs for 3-6 days, the disease is cured. Follow-up visit after half year shows no recurrence.

7) Burn and scald: It is introduced by TCM department of *Tangshan zhuan qu* hospital of Hebei province that *xie you* can treat burn and scald effectively. Pain would be relieved at once, and the skin scabs in short time. Facture is that 35-40 live *xie zi* (washed by cool boiled water and then insolated into

dryness) is soaked in 500g sesame oil (or replaced by olive oil) for 12 hours. More time for soaking, more better effect. The oil is used to cover the focus once or twice a day when blisters are cut. There is formication in focus after covered with the oil. The author considers that this formula, although it is quite effective, should be assisted by other treatments for big-area burn or III° burn.

8) Lung tuberculosis: Cavity in lung tuberculosis without cured for long time usually because the focus is rigidified. Usually dispersing stasis, eliminating carbuncle, resolving toxin and treating ulcer are applied to remove stale things and produce new things, i.e. promoting absorption of focus and close of cavity. *Kang lao san* is designed for this condition. *Zhi quan xie 60g, bai ji 60g, zhi wu gong 30g, di bie chong 30g, tai pan 60g* and *gan cao 15g* are grinded into powder, and 4g of powder is taken twice per day.

[case] patient *Chen*, male, 37, cadre. He suffered fibrous cavitory pulmonary tuberculosis (upper and middle leaves of left lung, upper leave of right lung) for more than ten years, and was treated by anti-tubercular drugs for several times but without effect. The manifestations were thin and weak body, dull complexion, cough with thick sputum or with blood sometimes, short breath, slight chest pain, night sweating, insomnia, poor appetite, slight greasy tongue, purple tongue, and thin, wiry and rapid pulse. It was a severe case of lung tuberculosis, due to obstruction of phlegm and blood stasis, and stay of pathogenic factor. The treatment methods are dispersing stasis, resolving toxin, and supplementing healthy *qi* and lung. After taking *kang long san* for one month, cough and sputum were relieved, spirit was higher, short breath disappeared, night sweating and insomnia were improved, and appetite was better. X ray test showed that focus was absorbed obviously and cavity was a little smaller. After taking drugs for another two months, symptoms disappeared, body weight was heavier. X ray test showed closed cavity and no inflammation. Now, he can do normal work.

9) Multiple abscess, lymphnoditis, carbuncle and furuncle: the diseases such as multiple abscesses and lymphnoditis are usually caused by tuberculosis, belong to *yin* furuncle and cluster phlegm. They are not easy to be cured quickly. Surgery department of fifth state expenditure clinic of Shanghai uses the followed formula to treat these diseases with good therapeutic effect. *Zhi quan xie 90g, feng fang 30g, chan yi 60g* and *zhi jia pian 120g* are grinded into powder and then made into pills with water as large as mung bean. 1.5g of pills is taken every morning. The dose is proper increased with better effect when we use it.

[case] patient *Shi*, female, 46, farmer. She suffered cluster phlegm and multiple abscesses of her left lower back and inner lateral of left thigh for more than 2 years. It was diagnosed as bone tuberculosis by county hospital. She was not cured after going to many hospitals. Pus flowed every day. She was treated by the formula mentioned above, 3g very time and twice per day. After ten days, the pus was less, fistula was shorter which was tested by probe, and the color of local focus changed into red and luster from gray and dark.

After taking drugs for 60 days, the wound nearly healed up. Follow-up visit shows no recurrence.

10) Obstinate eczema: it is introduced by *Zhao Bingnan*, a doctor of Beijing TCM hospital, that *quan chong fang* can stop wind, relieve itching, eliminate dampness and resolve toxin, and is good at treating obstinate eczema, cutaneous pruritus, neurodermatitis and eczema of scrotum. the formula is *quan xie 6g, zhu ya zao 6g, ku shen 6g, zao ci 12g, wei ling xian 12g, ci ji li 15g, chao huai hua 15g, chao zhi ke 9g* and *chan tui 3g*. The constitution of this formula is judgmatical. We record it for you to refer.

11) Cancers of lymph node: Oncology department of *Hongqiao* district first prevention and treatment hospital of Tianjin uses anti-cancer drugs II ② to treat two cases of Hodgkin disease and two cases of lymphosarcoma (all of them is verified by pathological sections.). They are only treated by herbs, without western medicine. *Quan xie 30g, wu gong 30g, sheng shui zhi 30g, xiong huang 30g, ku fan 30g, xue jie 30g, mu xiang 60g, mo yao 60g, zhu sha 60g, tian hua fen 60g, lu gan shi 15g, bai cong sha 15g, su he xiang you 15g, peng shao 15, bai ji 15g* and *qing fen 2g* are grinded into powder and then made into pills with water as large as mung bean. According to patient's tolerance, 2-10 pills are taken every time, three times per day. The side affect is a little nausea, but no disorder of liver, kidney and blood picture.

[case] patient *Tian* suffered original mediastinum and secondary cervical lymphosarcoma. The original focus was reduced by radiotherapy. Later on, large sarcoma occurred at neck, diameter was about 3.5 cm. After the patient only took anti-cancer drugs II for three months, the size of sarcoma was reduced to 0.5cm and the condition of patient was quite good. The sarcoma did not proliferate after half year, and the patient begins to work for half day.

The doctors of the hospital consider that anti-cancer drugs II can treat malignant lymphomas, including lymphosarcoma, Hodgkin disease and reticulosarcoma, with affirmatory effect. One case of reticulosarcoma is not classified as this group because the patient receives chemotherapy and radiotherapy at the same time. The sarcoma does not proliferate for nearly two years, which is considered to be related to anti-cancer drugs II. The drugs show effect after 20 to 30 days, and should be taken for three months at least in order to acquire therapeutic effect. There is no toxic effect after taking for six months continuously. Remission stage of this drug is quite long. Three cases of malignant lymphoma among four cases acquired good effect.

12) Pain due to hyperplasia spondylitis, rheumatoid arthritis and cancer: All these three diseases manifest pain. Pain due to hyperplasia spondylitis and rheumatoid arthritis is because of hyperplasia, deformation and destruction of bone. The pain due to cancer results from soakage and pressure of cancer. *Xie she san* can relieve pain of these three diseases. *Quan xie 15g, jin qian bai hua she 1* (or *wu xiao she 30g*), *lou zhou zi* (also called *nao yang hua zi*, fierce toxic) *4.5g, zhi wu gong 10* and *gou teng 30g* are grinded into powder and then filled into 10 packages. One package is taken every day, twice for

first day and once at night for other days. Ten packages make of one course of treatment.

[case] patient *Xu*, female, 46. She suffered rheumatoid spondylitis for more than 3 years. She could not hold her back straightly and smoothly move. X ray showed deformation of L2-5, osteoporosis and destruction of bone. She took indometacin and prednisone quit often to relieve fierce pain. The tongue was thin and white, and pulse was thin. She was asked to take 10 packages of *xie she san*, one package every time and twice per day. After 2 days, the pain began to be relieved. She was clinically cured after 30 days. There was no recurrence during the observation for half year.

13) Diseases of nerve system, bone and joints: *Fu* county first people's hospital of Liaoning province makes *quan xie* into injection^③ for the diseases of nerve system (Guillain-Barre Syndrome, sciatica, acute myelitis, peripheral neuritis, sequelae of cerebrovascular diseases, infantile paralysis and peripheral nerve injury) and locomotor system (strain of lumbar muscles, pain due to trauma and rheumatism, hyperplasia spondylitis, rheumatoid arthritis and scapulohumeral peri-arthritis), psoriasis, peritendineum, skin lipoma and so on. 460 patients are accepted and receive certain therapeutic effect. 100g of *quan xie* is quickly washed for twice in 1000ml of physiological salt solution, and then boiled for twice in 500ml of physiological salt solution for 30 minutes. After being filtered, the filtrate is concentrated to one third of original volume. After being cooled and filtered, the concentrated solution is mixed with triple 96% alcohol and then laid aside for 24h. Later on, the concentrated solution is filtered and alcohol is reclaimed for twice. The solution is boiled to evaporate rest alcohol, cooled and then mixed with distilled water. The solution is added to original volume, pH value is regulated to 6.0, and 80.5ml of tween (polysorbate) is added. Eligible filtrate is loaded and sterilized in 1000°C for 30 min. These are processes of *quan chong* injection. Based on meridian and collateral theory, the combination of acupuncture and injection is applied. Usually, local acupoints (or *A Shi* point) and acupoints according to meridian are selected. After the skin is sterilized routinely, the needle is inserted quickly according to methods of intramuscular injection. Speed of injection depends on patient constitute, duration and severity of disease. Injection can be quick for the patient with strong constitute, short course and severe disease. The injection volume depends on the locations of acupoints. The volume for acupoints of head and face is 0.5ml-1ml every acupoint, and 2ml-10ml for acupoints which locate in area of much muscles. The course of treatment varies according to diseases and patient's reaction. The treatment can be continuous until the disease is cure if the therapeutic is obvious.

[case] patient *Wang*, male, 49. Cerebral thrombosis formed in January, 1973, and resulted in dexter hemiplegia and alalia. He received treatment for 3 years but without effect. From 6th, November, 1975, he received treatment of *quan chong* injection. After five acupoint infections, the speech was smooth and right limbs and trunk can move about. He began to work in December,

1975.

14) Acute tonsillitis: 514 field hospital of Chinese People's Liberation Army uses powder of *xie wei* externally for 64 cases of acute tonsillitis with cure rate 98.44%. All the patient with acute throat pain, fever, swelling tonsil and purulent excretion covering tonsil are treated powder of *xie wei*, which is adhibited to *tian rong* acupoint (1cm below mandibula) by adhesive plaster with 3 cm². The drug is changed very day, and the disease usually is cured after 2-3 days without injection and medicine.

[case] patient *Zhou*, male, 7. He suffered 39.2°C of body temperature for more than one day, accompanied by arthralgia, throat pain and dysphagia. He was hospitalized at 14th, November, 1974. Physical test showed no signs of lung and heart, hyperemia and redness of pharynx, II°swelling of tonsil, bleed points in soft palate. The number of leucocyte was 26,000, and the proportion of Neutrophil was 85%. Received the treatment mentioned above and VitC tablet, the body temperature and leucocyte volume began to descend. After 3 days, the body temperature was 36.9°C, bleeding points disappeared, the number of leucocyte was 11,200, the proportion of Neutrophil was 78%, all symptoms disappeared and the patient can eat food normally.

15) Acute leukemia: This disease has short course and high death rate. Though chemotherapy is effective, but it is toxic and has quite many side effects. So, it is an important way to search therapeutic methods in TCM field. Oncology group of herbs research institute of academy of Chinese medical science uses *an lu san* ④ to treat acute leukemia (including acute lymphocytic leukemia, acute myelocytic leukemia, acute monocytic leukemia, acute erythrocytic leukemia, etc.) with certain effects.

An lu san contains *quan xie*, *wu gong*, *jiang can*, *de bie chong*. They are parched and grinded into powder with same dose. Usually, 0.7g of powder is taken three times per day. Chronic myelocytic leukemia without blaster crisis can take 0.3g of powder three times per day. The powder is mixed with chicken eggs and then steamed for taking.

The patients with high due to inflammation can be treated by *jin yin hua 30g*, *huang qi 30g*, *dang gui 15g*, and *gan cao 15* at the same time to nourish *qi* and blood, activate blood, disperse stasis, clear heat and resolve toxin.

The total remission rate of 29 cases is 48.3%, and appetite, ecumenic conditions and blood pictures of 65%-80% of patients are improved. It is worth further researches.

References:

- ① experiment of *xie jia ling ji tang* treating flowing fire, *Jiangsu TCM*, 5:36, 1966
- ② anti-cancer drugs II treating 4 cases of cancers of lymph node, *Tianjin TCM*, 2:112, 1975
- ③ process and primary application of *quan chong* injection, *medicine and hygiene*, 3, 1976
- ④ brief summary of clinical try of *an lu san* on acute leukemia, *Chinese herb*

research data, 3:20, 1977

2. *Wu Gong* (centipede)

Wu gong is dried whole body of *Scoplopendra subspinipes mutilans* L., Koch. Its popular name is *bai jiao* (hundreds of feet). It is mainly produced in Jiangsu province, Zhejiang province, Sichuan province, Hubei province, etc.. It is pungent in flavor, slight warm in nature, slight toxic and attributive to liver meridian.

Doctor *Zhang Chunxi* considers that *wu gong* is powerful good at wandering, both going into *zang* and *fu* organs and going out into meridians and collaterals, so it can open all the places where blood stasis exists; it is slight toxic, but expert in resolving toxin, and treating carbuncle, ulcer and all kinds of toxin; it is special good at searching wind, so can treat liver wind, such as epilepsy, vertigo, spasm, twitch and tetanus neonatorum, and also treat wind invading meridians and collaterals, such as eyes and mouth distortion and numbness of limbs.

Medical actions: 1) Stopping wind and spasm: If spasm, eyes and mouth distortion and numbness of limbs due to wind can not be relieved by other drugs, *wu gong* can be added and usually would produce good therapeutic effect. 2) Dispersing stasis and resolving toxin: It can eliminate hardness and resolve toxin for tumor and toxin of carbuncle, ulcer and abscess. By elementary clinical observation, it can control the development and improve the symptoms of cancers (such as stomach cancer, breast cancer, esophageal carcinoma, liver cancer and skin cancer.) with the help of *mu bie zi*, *pao shan jia* and so on.

“*ben cao gang mu*” said it can defeat snake, so it is an important drug for snake bite. It also can relieve the tidal fever due to lung tuberculosis. 3) Smoothing joints: It is quite helpful for deformation and spasm of joint due to rheumatoid arthritis. 4) Killing zygote: “*bie lu*” mentioned that it can induce abortion and disperse stasis. Contemporary doctors use it to treat ectopic pregnancy (zygote is alive.) with good therapeutic effect.

Wu gong contains toxic component similar to bee venom, i.e., histamine-like substance, hemolytic protein and so on. It can inhibit skin fungus and *Bacillus tuberculosis*, and promote human metabolism. That's why occur improved appetite, red complexion and hyperplasia of granulation tissue after two weeks, and increased weight and improved spirit later on, when *wu gong* powder is used to treat bone tuberculosis. Thus it can be proved that *wu gong* not only is nontoxic, but also can strengthen the constituent.

Large dose for oral administration, such as more than ten strips every time, often results in red macula all over the body. The size of macula is large than that of soybean, red color can disappear by pressure and the macula mainly locates at elbow and knee. They will disappear spontaneously after stopping taking drugs for two or three days. The mechanism of this is not known yet, may be the toxic actions of hemolytic protein. Therefore, the dose must be controlled, that is, fewer than ten strips every time for decoction and less than

4g for powder. The pregnancy woman is forbid.

The head and feet of *wu gong* need not be cut off. Otherwise, the medical actions would decrease. The power of pill and powder is stronger than that of decoction. The clinical applications are discussed as follows.

1) Eyes and mouth distortion: TCM considers wind, invading into meridians and collaterals or *zang* and *fu* organs, as the cause of this symptom. Treatments should depend on disease differentiation and syndrome differentiation. *Wu gong* are good at dispersing wind and calming collaterals, so it can effectively treat the eyes and mouth distortion due to wind invading into meridians and collaterals, that is, early stage of peripheral facial paralysis. The prescription author often uses is that the *sheng wu gong* powder 1g is taken with the decoction of *fang feng* 6g, *jiang can* 9g, *zhi bai fu zi* 6g, twice per day.

[case] patient *Xu*, male, 37, worker. His constituent was good. He felt numb of left cheek suddenly eight days before. He felt difficulty in moving lips when he was speaking. Later on, mouth was pulled toward right, left eye can not close, left mouth angle sagged a little, and tongue tilted towards right when it extended. He could not whistle. He was diagnosed as peripheral facial paralysis by some hospital, and was treated by electrotherapeutics and medicine without therapeutic effect. When he went to our hospital, three doses of the formula mentioned above were prescribed to him. After taking first dose, he felt the pull sensation relieved. After second dose, the distortion was improved a lot. After third dose, the distortion was nearly cured.

Comment: the course of treatment should be prolonged for longy disease, and some related drugs should be added according to the deficiency or excess of *yin*, *yang*, *qi* or blood.

2) Bone tuberculosis and scrofula: TCM academe of Heilongjiang province used *jie he san*① to treat Bone and joint tuberculosis and scrofula with quite good therapeutic effect. The vitro tests they did showed that the acid alcohol lixivium of *jie he san* could inhibit *Bacillus tuberculosis*. Our clinical practices prove that it is effective to bone tuberculosis and scrofula. The prescription is that *wu gong*, *quan xie* and *di bie chong* (the proportion of them is 44:50:44) are mixed and then grinded into powder. 10g of powder is mixed with chicken egg, stirred into well-distribution, and cooked for adult, three times per day. The dose is reduced for woman and child.

The dose of original formula is quite large, 30g of total dose per day, and the form is powder. We use half dose and also receive therapeutic effect. So, the reduced dose can be taken into consideration under the circumstances.

Additionally, it can be referred that the tuberculosis department of third hospital of Chinese People's Liberation Army uses *wu gong* ointment ② to treat cervical scrofula. One strip of *wu gong* is bake without head and feet and then grinded into powder. Powder and 20ml of plant oil are stirred into well-distribution, and then cover the focus, once per day. Ten times constitute one course of treatment.

[case] patient *Tang*, male, cadre. He was hospitalized because of lung tuberculosis. Swelling cervical lymph node was found by physical examination, the size was as large as that of walnut, and the pain was obvious by pressure. After receiving the therapy of *wu gong* ointment for eight times, the size was reduce to that of soybean, and the pain disappeared.

3) Epilepsy and convulsion: *wu gong* and *quan xie* are grinded into powder with the same dose. 1-3g of powder is taken with water, three times per day. The dose is decided by age and disease condition. Animal experiments show that these two drugs are effective to the convulsion caused by nervus centralis stimulants. Continuous administration can reduce or inhibit the outbreak of frequent recurrence of epilepsy. *Wu gong* can be added into the drugs, which are selected by syndrome differentiation, to stop spasm and relieve convulsion for convulsion due to child encephalitis B and high fever. *Wu gong*, *jiang can*, *quan xie*, *zhu sha* and *gou teng* are grinded into powder with same dose. This is also an effective formula for child convulsion. 1.5g-3g of powder is taken twice or three times a day.

[case] patient *Diao*, female, 21, farmer. He fainted and twitched suddenly seven years before. After ten minutes, he came to himself. From then on, there was a recurrence every one or two months, manifesting as coma, foaming at the mouth angle, spasm and twitch of limbs, and even aconuresis. After 5-15 minutes, he resuscitated and felt dizziness and fatigue. After one or two days, he felt as normal. Tongue was thin and greasy, and pulse was wiry and slippery. It is epilepsy. It is caused by fright injuring liver and kidney, which results in ascending of wind and fire, disturbing of spirit by phlegm and fire. The treatment methods were dispersing wind, suppressing convulsion, eliminating phlegm and descending fire. The powder form was used to treat disease gradually. *Zhi wu gong*30g and *zhi quan xie* 30g were grinded into powder. 2.5g of powder was taken with the decoction of *gou teng* 9g, *ju hua* 9g and *xia ku cao*9g, twice a day. There was not any discomfort after taking drugs. There was no recurrence after taking drugs continuously for two months. There was no recurrence until now after drug withdrawal.

Comment: *chuan bei mu* and *tian zhu huang* can be added for much phlegm; *huang lian* and *long dan cao* can be added for fire excess.

4) Poison due to snake bite: Besides local pain and swelling, series of wind phenomena (poisoning symptoms of nerve system) occur quickly, such as swelling sensation of head and eyes, diplopia, paralysis of limbs, twitching, restlessness, even delirium, and coma. If not treated right away, the patient usually would die. *Wu gong*, resolving snake poison and relieving the symptoms mentioned above, is one of main drugs of many empirical formulas for treating snake bite. *Wu gong* is grinded into powder, and 2-3g of powder is taken four times per day. Other related rescue methods should be taken for severe conditions, helping the patient turn the corner.

[case] patient *Zhu*, male, 42, farmer. His right back of hand was bite by Pallas pitviper when he was working in the farm that morning. It was fierce

pain and the swelling reached the elbow after half an hour. Then he arrived at hospital, the swelling had reached axilla. The tongue was white and thin, and the pulse was thin and rapid. It was due to snake poison attacking heart and disturbance of internal wind. The treatment methods were resolving toxin and dispersing wind. The prescription was *zhi wu gong* powder 3g, once every six hours. The areas of swelling were punctured by thick needles to lead poison out in many locations. Pain was relieved and spirit was calmed that afternoon after taking drugs. The swelling was obviously relieved second day (so, 2g of the drug was taken three times per day later on), and was cured after continuously taking drugs for three days.

5) Breast abscess: It just is mastitis, manifesting as diffuse swelling, pain, hard mass and suppurate if without being eliminated quickly. *Wu gong* can disperse stasis, resolve toxin, and eliminate abscess and swelling. The therapeutic effect occurs quickly. 2 strips of *Wu gong* and 4 strips of *quan xie* are baked and then grinded into powder. The powder is taken with Shaoxing wine by two times. There is another method. *Wu gong* is baked on the tile and then grinded into powder. Powder is mixed with Vaseline to make 20% *wu gong* gauze. The gauze is squeezed into breast once a day after focus is washed. It can draw toxin and promote coalesce for suppurate of mastitis.

[case] patient *Zhang*, female, 26, cadre. She suffered sudden redness, swelling and pain of right breast, aversion to cold and fever two months after child-birth. She received antibiotics without cured. Physical examination indicated that the breast abscess was not mature. She was prescribed by the formula mentioned above. The aversion to cold and fever disappeared, and swelling and pain were relieved in that evening after taking drugs. The disease was cured next day.

6) Child dyspepsia: Hunjiang first people's hospital used *wu gong er cha san*® to treat 30 cases of child dyspepsia, among which the youngest child was 3 months and the oldest was 2-year old. The main symptoms were diarrhea, vomiting and scanty of urine. There were 6 cases of severe loss of body fluids, 2 cases of medium loss of body fluids and 12 cases of mild loss of body fluids. *Wu gong er cha san* is made by that *wu gong*, which is dried by slow fire (yellow, but not scorched), and *er cha* are grinded into powder. On the basis of synthetical therapy (enhanced nursing, fluid infusion for loss of body fluid, etc.), *wu gong er cha san* were taken three times a day. The dose was that 0.2g of *wu gong* and 0.125g of *er cha* were given to the children less than 6 months, 0.4g of *wu gong* and 0.25g of *er cha* were given to the children between 6 and 12 months, and 0.6g of *wu gong* and 0.25g of *er cha* were given to the children between 1 and 2 years old. Except one patient stopped taking *wu gong er cha san* after one day, other 29 patients were all cured.

"*bie lu*" once mentioned that *wu gong* can treat coldness, heat and mass in heart and abdomen, indicating that it can regulate the functions of stomach and intestine. The combination use of *wu gong* and *er cha* which has astringent function to stop diarrhea, i.e. combination use of warm, cold, open

and astringent drugs, can regulate middle *jiao*. The drugs which can supplement spleen and move middle *jiao*, such as *bai zhu*, *mu xiang*, etc., can be added for spleen deficiency.

7) Mouth ulceration: *Wu gong* powder and a little *mei pian* are mixed with chicken egg white and then cover the focus of mouth ulceration. The therapeutic effect usually is quick.

8) Corn: No matter where does corn locate, *wu gong* powder mixed with 5% *bing pian* can be put on the corn and sealed by adhesive plaster. Corn will be softened and drop after several days. (Adhesive plaster must be stick on the corn firmly and tightly, otherwise, there is no therapeutic effect.)

9) Pertusis: The popularized name is *dun ke* (fit cough), which characterizes as paroxysmal and spasmodic cough. *Wu gong* and *gan cao* are grinded into powder with same dose. The children between 1-2 years old take 1.5g of powder, and the children between 3-4 years old take 2g, three timers a day for 5-7days. Usually the therapeutic effect is quite good. In the formula, *wu gong* relieve spasm and stop cough, and *gan cao* can moisten lung and stop cough. They supplement each other.

11) Cervical carcinoma: drugs can eliminate turbidity, resolve toxin, break hardness, disperse stasis, and regulate *chong* and *ren* meridians for middle or later stage of cervical carcinoma, which loses the operation chance with some therapeutic effects. The experience of one of affiliated hospitals of Shanxi medical college on this disease is worth studying and referring.

(1) Cervical carcinoma decoction: *wu gong* 2 strips, *quan xie* 3g, *kun bu* 4.5g, *hai zao* 4.5g, *xiang fu* 4.5g, *bai zhu* 4.5g, *fu ling* 4.5g, *bai shao* 9g, *cai hu* 2g, *dang gui* 6g. The drugs are steamed and 1-2 doses are taken every day. The formula can be modified according to symptoms.

(2) Powder for external use: *Wu gong* 2 strips, *qing fen* 3g, *bing pian* 0.3g, *she xiang* 0.15g, *huang bai* 15g are grinded into powder, or *xiong huang* 15g can be added. Drugs powder is dipped by big tampon and then put into vagina until fornix, very closely to cervix. At the beginning, the drugs are changed every day (paused during the menstruation). The frequency can be reduced gradually according the disease condition, until biopsy is negative (no cancer cells). 10 patients of cervical carcinoma they treated are still alive, among which the longest one is 9 years. This formula also is effective to cervical erosion.

12) Ectopic pregnancy (zygote is alive): Ectopic pregnancy formula (*dan shen* 9-15g, *chi shao* 6-9g, *tao ren* 6-9g, *ru xiang* 3-6g, *mo yao* 3-6g) added with *wu gong* 2 strips (grinded into powder and taken with decoction), *san leng* 3-9g, *e zhu* 3-9g and *niu xi* 6g can make zygote die to cure ectopic pregnancy (zygote is alive).

13) Lower limbs ulceration: After the focus washed by the decoction of *jin yin hua* and *ye ju hua* with proper dose, proper dose of *wu gong* powder is used to cover the focus and then covered by adhesive plaster. The drug is changed every day and ten days constitute one course of treatment. This

method can disperse stasis and resolve toxin to promote the coalescence of ulcer.

14) Cutaneous carcinoma: Changwei people's hospital of Shandong province^④ used *wu gong* to treat cancerization of gastric ulcer effectively at first. Then they found that *wu gong* also can treat breast cancer, esophageal cancer, liver cancer and gastric cancer with some therapeutic effects. In the recent years, *wu gong* was made into injection to treat cutaneous carcinoma for 5 cases, which were all cured. The method is that infiltration injection is applied to inject 2-4ml of *wu gong* injection into basal part of cancer every day. If the cancer is big, the injection can be diluted by water for infection and infiltrates the whole basal part as possible. The cancer usually begins to dry, lessen and drop after 30 injections, and cancer cells disappear after 60 injections. Then the injection is stopped, common drugs change of surgery is taken for ulcer until coalesce. The side effects are fever and chilling, which usually take place several minutes after injection (not every time) and reduce spontaneously after 30-60 minutes. It needs further research that whether this kind of side effects is related to toxic substance of *wu gong*. There were no side effect and no therapeutic effect of the second batch of injection which is adsorbed by active carbon, indicating that the active ingredients were lost.

15) Chronic osteomyelitis: Ten strips of *wu gong* are grinded into powder and then put into capsules. One seventh of capsules is taken every day. The external treatment is that *wu gong* powder is dipped by Vaseline gauze and then filled into fistula. The drug is changed every day.

16) Chronic ulcer, furuncle and inflammation due to trauma: Two strips of *wu gong* are dipped into 100g of rape oil (the longer, the better.). The oil can resolve toxin, eliminate swelling, draw pus and promote the growth of muscle. The all focuses of chronic ulcer, furuncle and inflammation due to trauma can be covered by the oil once a day. Additionally, *wu gong* sheath can be use to diminish inflammation, resolve toxin, draw pus and relieve pain for panaritium (purulent infection of finger). The processes of making *wu gong* sheath are showed as follows. One strip of *wu gong* (baked) and 18g of *song xiang* (gum rosin) are grinded into powder and then poured into earthen bowl which contains boiled water. The powder dissolves into gelatin and bonds into roll in the hot water. Then, the sticky roll is kneaded into finger-sheath-like form when it is warm. The patient's finger is covered by the sheath. When the sheath becomes cool, it is just *wu gong* sheath. If it is used for abscess without burst, the abscess would burst and pus would flow out after two to three days or five to six days. Before the abscess bursts, the finger sheath should be taken off every day, and then the finger should be washed by warm water. If it is used for the abscess which already bursts or is carved for drainage, the finger sheath should be taken off every morning and evening. Then, the trouble finger and the sheath should be washed by warm boiled water or physiological saline solution. At the beginning, pus is abundant. Later, the pus becomes less quickly and the surface of wound is red and

lustrous. The disease usually is cured after 10 to 20 days.

17) Loss of hair and alopecia: More than ten strips of alive *wu gong* are soaked into 250g of bean oil. Three days later, the oil can be dipped by tampon and then used to cover the focus twice per day for 7 to 14 days continuously. By clinical observation, the oil can promote the produce of hair. It is worth researching that whether is the slight blue toxic fluid, released from the mouth of alive *wu gong* when it is soaked into bean oil, contains growth substance.

18) Chronic bronchitis: *Wu gong san*^⑤ was used to treat 115 cases of chronic bronchitis with total effective rate 92%. *Wu gong* was baked on the tile and then grinded into powder. One small hole was made in a chicken egg, and then egg white was poured out a little. Powder was put into the egg through the hole and then sealed off and steamed. The egg was taken with warm boiled water every morning. Five days and two paused days composed one course of treatment. The patients received five courses continuously. The patients younger than 15 or older than 50 took one egg everyday, and the patients between 16 and 49 years old took two eggs every day.

19) Acute and chronic nephritis: *Wu gong dan*, a civilian proved recipe, was used to treat 36 cases of acute and chronic nephritis^⑥. 35 cases were cured, and one cases failed. One strip of *wu gong* without head and feet was baked and then grinded into powder, which was put into chicken egg and stirred into well-distribution. Egg was wrapped by damp paper and yellow earth, and then roasted in kitchen range. One was taken every day, and seven days composed one course of treatment. If the disease was not cured after one course, the next course would begin three days later. Before taking this formula, the patients manifested edema, sore waist, poor appetite, dull spirit, etc., and were diagnosed as acute or chronic nephritis by laboratory tests. During the treatment, the patients were asked to have good rest, eat food with low content of salt and not to take other drugs. Most of them were cured after two to three courses, and some were cured after four to six courses. By observation, it is effective to edema and albuminuria. It should be stopped when the patient fell itching of skin after taking drugs, because it is allergy to xenogenic animal protein.

20) Virus herpes: 10g of *wu gong* is grinded into powder and mixed with sesame oil. It is used twice or three times a day. The therapeutic effect is good.

* * * *

Comment: Doctor *Zhang ci gong*, my teacher, is famous for being expert in using insect drugs to treat some obstinate diseases. He once treated a patient with splitted headache, frequent vomiting and fierce groan. Besides the formula for nourishing blood, suppressing liver and dispersing wind, one strip of big *wu gong* and 0.7g of *bing pian* were grinded into powder and then snorted into nose every three hours. Some time after sneezing several continuous times, the pain was reduced a lot and vomiting was stopped. The

disease was cured after two days. This method is worth referring.

* * * *

Another comment: Although both *quan xie* and *wu gong* can disperse wind, calm convulsion, resolve toxin and eliminate carbuncle, the functions of them are a little different. *Quan xie* is good at calming convulsion and relieving spasm and twitching, while *wu gong* is good at resolving toxin and dispersing stasis. Therefore, spasm and convulsion due to wind should be treated by *quan xie*; if the wind is due to excessive heat, disturbed by heat toxin, *quan xie* can be assisted by *wu gong* to acquire more obvious therapeutic effect. *Wu gong* is expert in resolving toxin and eliminating carbuncle for surgical diseases, resolving snake poison in particular. *Quan xie* is suitable for all the convulsions manifesting as askance, superduction and coma, while *wu gong* is suitable for that manifesting as mania and restlessness. Doctor Hun Tieqiao once pointed out the differences between *wu gong* and *quan xie*. He said, there also are grades among these insect drugs—*wu gong* is the fiercest and *quan xie* is the mildest; *wu gong* can stop the all the wind which can not stopped by *quan xie* and *xie wei*, however, some cases can be treated *wu gong* and some can not; lockjaw is the severest case of convulsion, and can not be cured without *wu gong*; *quan xie* is competent to treat common spasm and *wu gong* is not need. These comments are real experiences.

①case report on synthetical therapy relying mainly on *jie he san* for bone and joint tuberculosis. Harerbing TCM, 11, 1960

②introduction of *wu gong* ointment on cervical scrofula, New Medical Journal 5, 1974.

③*wu gong er cha san* for child dyspepsia, Hunjiang Science and Technology 6, 1972.

④*wu gong* injection for tumor, Clinical Date Collection, compiled by Changwei board of health, 1973.

⑤observation of *wu gong san* for chronic bronchitis—Laoshan board of health, Qingdao Date Collection of Prevention and Treatment for Chronic Bronchitis.

⑥Hou Shilin: *wu gong ji dan* for 36 cases of acute and chronic nephritis, TCM Journal 8:32, 1979.

3. *Jiang Can* (batryticated silkworm)

(subsidiary drugs: *can sha*, *can jian*, *can tui zhi*, *can yong*)

Jiang can is dried whole body of larva of *Bombyx mori* L. infected by *Beauveria bassiana* (Bals) Vuill. It is also called *tian chong*, produced in Jiangsu province, Zhejiang province, Sichuan province, etc. The stool of silkworm is called *can sha*, the paper which contains shell of silkworm is called *can tui zhi*, the silk shell made by the larva before it becomes pupa is called *can jian*, and pupa of silkworm is called *can yong*. These all can be used as drugs. *jiang can* is salty and pungent in flavor, mild in nature and attributive to liver, heart, spleen and lung meridians.

Actions: (1) dispersing wind and reducing heat, (2) eliminating phlegm and

softening hardness, (3) resolving toxin and relieving spasm, (4) dredging meridians and collaterals. It is most suitable for the infection by warm pathogen. Therefore, “*han wen tiao bian*” wrote by doctor *Yang Lishan* regards *jiang can* as the most important drug for seasonal warm diseases. Because it can disperse wind, descend fire, eliminate phlegm, soften hardness, resolve toxin and treat ulcer, it is suitable for throat obstruction, swelling throat, itching due to urticaria, scrofula and so on which is due to wind, heat, phlegm and fire. It usually is used with *da bei mu*, *yuan shen*, etc., to treat acute laryngitis, mumps and scrofula effectively; with *bai ji* to treat cavitory lung tuberculosis with some therapeutic effects; with *hong hua*, *jing jie* and *zong lv ye* to treat wind stroke; with *su zi*, *niu zi*, *zhu sha*, *sheng jiang*, etc. to treat epilepsy. 4.5g of powder of *jiang can* and *chan yi* (2:1), three times a day, can treat fever due to influenza and wind-heat type of common cold with good therapeutic effect. Powder of *jiang can* can be swallowed to treat headache due to wind. *Jiang can*

also can disperse exterior, so it is suitable for unsmooth appearance of measles and pox due to obstruction of wind and heat. It also can treat diabetes mellitus with some therapeutic effects. Additionally, doctor *Li Shizheng* mentioned that, in “*ben cao gang mu*”, it can treat mass, showing its functions of softening hardness and eliminating mass. He also mentioned that the pills made from *jiang can* and *bai ma ni* (urine of white horse) are good at treating mass and heart pain.

Therefore, we once tried to treat gastric carcinoma, liver cancer and other abdominal mass by the pills. By elementary observation, it is effective.

Jiang can contains fat and protein. *Beauveria bassiana* (Bals) Vuill contains steroidal anti-11 α -hydroxylase, which is used to generate corticoids. It still needs further research that whether *jiang can* cures the diseases just by enhancing human defensive functions and by regulating human functions. Its alcohol lixivium hypnotizes mouse and rabbit, and its decoction confronts the convulsion of mouse caused by strychnine.

Contraindication is blood deficiency without wind-heat pathogens or mass. The dose is 9g-18g for decoction, and 1g-2.5g for powder. Baked form is used quite often. But the crude form is suitable for dispersing wind and heat, because the function of dispersing exterior is reduced after being baked. The clinical applications are discussed as followed.

1) Early stage of heat diseases: Exterior syndrome of febrile diseases usually is accompanied with interior syndrome at the early stage. If both exterior and interior are treated, and both external part and internal part are regulated, usually the doctor can get twice the result with half the effort, cutting and turning the development of diseases. The author usually uses *biao li he jie dan* whose main drug is *jiang can* to treat beginning of many febrile diseases whose syndrome is combination of exterior and interior, or three to five days duration which still has exterior syndrome. Usually the pulse becomes calm and body becomes cool or the symptoms are obviously

relieved with diarrhea after taking drugs. The diseases are usually cured after taking drugs for several times. Perhaps because it can disperse both interior and exterior syndromes at the same time and shorten the course of diseases by dispersing exterior, reducing heat, clearing intestine and resolving toxin. Except healthy *qi* deficiency, unformed stool due to spleen deficiency, or mild fever with severe aversion to cold, all the patients, no matter adult or child is, can be treated by *jiang can*. The formula is *jiang can* 45g, *chan yi* 30g, *gan cao* 30g, *da huang* 135g, *zao jiao* 15g, *guang jiang huang* 15g, carbonized *wu mei* 15g and *hua shi* 180g. They are grinded into powder and then made into pills as large as mung bean with the juice of raw *huo xiang* 30g, raw *bo he* 30g and raw *luo bo* 240g. The adults take 4g-6g every time, and women and weak patients take reduced dose. Children about ten years old take 2g, between 6-8 years old take 1-1.5g, and between 2-5 years old take 0.5-1g, once a day for one to three days. When the fever abates, the drugs do not need to be taken.

[case] patient *Zhao*, female, 28, worker. She suffered headache, pain limbs, aversion to cold, fever, fatigue and chest oppression for four days. She sweated after taking Aspirin tablet, but the fever did not abate and became higher in the evening. The temperature was 39.2°C. She felt slight thirsty and greasy of mouth, and had not discharged stool for two days. The tongue coating was white and a little greasy at middle area and root of tongue. The pulse was floating and rapid. This was due to invading of wind and heat, and stagnation of dampness. The treatment method was dispersing interior and exterior at the same time. 9g of *jie biao he jie dan* was put into two parcels. One parcel was taken with water every day. Five hours after taking drugs, the patient discharged stool once, and the temperature descended to 37.6°C in the evening. The temperature became normal next day and all the symptoms disappeared except fatigue. The disease was cured two days later by diet therapy and rest.

2) Gastric carcinoma: enlightened by “*ben cao gang mu*” that *jiang can* and *bai ma ni* are used to treat mass and epigastric pain, doctor *Zhu Ziqing* cured one case of liver cancer by *xiao yao san* and modified formula mentioned above. The author once used *jiang can*, *wu gong*, etc. to treat tumor with some therapeutic effects.

[case] patient *Shang*, male, 42, farmer. His constitution was good. In the recent some months, he felt epigastric pain and vomited with saliva and food (only thin and soft food can be taken). The body became thin, and he suffered constipation, once per five or six days. Mass in the upper abdomen could be touched. He was diagnosed as stomach cancer by some hospital, and was suggested to have an operation. The patient was afraid of that, so he went to our hospital for treatment. The tongue coating was white and greasy, and pulse was thin and wiry. The disease was so severe that the prognosis won't be good. Besides *xuan fu dai zhe tang* was applied to suppress reverse and regulate stomach to relieve the vomiting, the followed pill was used to soft

hardness to acquire therapeutic effect gradually. The formula was *zhi jiang can 120g, zhi wu gong 48g, pao shan jia 48g, ma qian zi 24* (moistened, peeled off, deepfried into yellow color by sesame oil and then stir-fried by sandy soil to remove oil), *liu huang 9g*. They were grinded into powder and then made into pills with honey as large as longan stone. One pill was taken every day. After ten days, the pain was reduced and vomiting was stopped. After taking drugs for more than two months continuously, the appetite became normal and mass disappeared. The disease did not recur in the next seven years. The patient died of blood poisoning at last..

3) Eyes and mouth distortion: *Ping gan qu feng tang*, whose main drugs are *jiang can* and *quan xie*, can treat some obstinate cases of eyes and mouth distortion with not bad therapeutic effect. The formula is *jiang can 12g, zhi quan xie 1.5g* (grinded into powder and half is swallowed every time), *sheng bai shao 9g, zhu ru 9g, shi jue ming 24g* (or replaced by *zhen zhu mu*30g). One dose is decocted by water very day, and the decoction is taken twice a day. As for longy and severe diseases, 6g of *Zhi bai fu zi* should be added and at least 20 doses should be applied continuously.

[case] patient *Li*, male, 30, cadre. He felt numbness of his right check, then mouth distorted to left and right eye could not close. He took medicine for one week from the next day. But he did not receive obvious therapeutic effect. The tongue coating was slight yellow, and pulse was wiry. This was due to upper disturbance of liver wind and liver *yang*. The treatment methods were suppressing liver *yang* and dispersing wind heat. The symptoms were relieved after taking four doses of the formula mentioned above, and the disease was cured after taking another five doses.

4) Scrofula: swelling and hard nodule without suppurate can be treated by the followed formula. Two portions of *jiang can* and *da bei mu*, and one portion of *quan xie* are grinded into powder and then made into pills as large as mung bean. 4g of pills are taken twice a day after dinner. Continuous administrations can promote the dissipation of nodule. The pills can be taken with the decoction of *yuan shen 9g, mai dong 9g* and *xia ku cao 9g* for liver and kidney deficiency and stagnation of phlegm and *qi*.

5) Infantile convulsion: (1) Formula for external use: *jiang can* one strip, *quan xie* one strip (both are baked on the tile), *zhu sha 0.7g* and *she xiang 0.15g* are grinded into powder, mixed with human milk and then made into cream-like form. The mixture is put on the cloth which is as large as copper coin, and then covers *tai yang* acupoint. Usually therapeutic effect would occur. (2) The formula of "*bao ying ji*". *Qing hao chong* (the worm in the joints of *qing gao* are collected near the Autumnal Equinox.), *zhu shao* and *qing fen* are made into pills as large as millet. One pill is used for one-year age. The book says that nine of ten patients would receive therapeutic effect. *Jiang can* and *quan xie* are added into the formula according to a folk proved recipe. The effect for infantile high fever and convulsion is quick and good. So the formula is named *jie re ding jing wan*. *Jiang can* 5 strips, *quan xie* 3 strips,

zhu sha 5g, *qing fen* 6g are grinded into powder and made into pills with *qing hao chong* as large as mung bean. 2-4 pills are taken every time, twice or three times a day. The pills are stopped taking when the temperature is normal and spasm stops.

[case] patient *Zhang*, male, 6. He suffered fever for four days. The temperature would not be reduced by sweating, and rose in the afternoon. The highest temperature was 39.8°C. In the evening, restlessness and delirium occurred, convulsion appeared sometimes. The tongue was slight red, the coating was yellow, pulse was rapid, and finger veins were livid purple. This was due to warm and heat pathogens invading into *qi* phase and wind transformation from extreme heat. 9 pills of *jie re ding jing wan* were prescribed, three pills every time and three times a day. The pills were taken with the decoction of *sheng di* 9g and *zhi mu* 9g. Three hours later, the body temperature was reduced to 38.2°C, and convulsion and restlessness were relieved a little. The next day, body temperature descended into 37.5°C, and delirium was also relieved. The patient was cured after regulation.

6) Urticaria: it is called *bei lei* in ancient times. It is usually caused by wind and heat invading into *ying* phase, and the treatment methods are dispersing wind, reducing heat, cooling blood and activating blood. The minority of cases are caused by spleen deficiency and wind dampness hiding in muscle striae, the treatment methods are supplementing spleen, dispersing wind and eliminating dampness. Supplementing *qi*, nourishing blood, dispersing wind and eliminating dampness should be used for *qi* and blood deficiency in repeated recurrence and longy cases. Because *jiang can* is good at dispersing wind and reducing heat, it is effective for wind and heat type of urticaria. Formula I is *jiang can* 60g, *she tui* 30g, *sheng da huang* 120 and *jiang huang* 45g. They are grinded into powder, and 6g of the powder is taken every time with sugar water, once a day. The disease would be cured by sweating after taking drugs once. If the disease is not cured, the drugs need to be taken right along. Formula II is *jiang can*, *jiang huang*, *chan yi* and *wu xiao shao* are grinded into powder with the same dose. 4.5g of powder is taken every time, twice a day. This formula can disperse wind, scatter heat, activate blood and disperse stasis, suitable for obstinate urticaria. These two formulas have the same basic functions, however, the first one is suitable for the patients with strong constitution, and the second one is suitable for the patients with wind and heat excess and spleen *qi* deficiency.

[case] patient *Li*, male, 28, worker. He suffered urticaria for three to four years. The disease was severe in spring and winter, and induced by sea foods. During the outbreak, the anthema appeared all over the body, and was extreme itching. Abdominal pain occurred sometimes. He usually felt thirsty and had constipation. The tongue was red, coating was yellow, and pulse was wiry and rapid. This was due to stagnation of wind and heat in *ying* phase and obstruction of damp-heat. The treatment methods were dispersing wind, reducing heat, cooling blood and regulating blood. 12g of formula I was taken

by two days. After taking drugs, he got smooth stool and the antherma disappeared right away, and did not recur the next day.

7) Chronic pharyngitis: it belongs to *yin* deficiency type of throat obstruction, which usually is caused by that longy obstruction of phlegm and heat consumes lung and kidney *yin*, resulting in deficient fire which burns the throat. The manifestations are redness and pain of throat, follicle in throat, discomfort and obstruction sensation of throat which is aggravated by much speech, unsmooth voice, often dry mouth and throat, red tongue, white tongue coating, wiry and thin pulse, or accompanied with rapid pulse. The treatment methods are nourishing *yin*, clearing heat, eliminating phlegm and soothing throat. The formula is *zhi jiang can* 6g, *zhi quan xie* 6g, *huang lian* 6g, *zhi feng fang* 12g, *jin yin hua* 12g, *dai zhe shi* 12g and *sheng mu li* 12g. They are grinded into powder and then divided into 20 packages. One package of drugs is taken with tea of *sheng di* 6g, *bei sha shen* 6g and *mai dong* 6g two hours after meal, twice a day. After taking drugs for 3-5 days, the patient would feel throat comfortable. The therapeutic effect would be enhanced by continuous administrations.

[case] patient *Yu*, male, 54, cadre. He suffered chronic pharyngitis for more than three years. The disease had been treated for many times, but without being cured. After giving lectures for long time, he had obstruction sensation of throat and husky voice. The tongue was red, coating was thin and yellow, and pulse was wiry, thin and rapid. This was due to *yin* deficiency constitution, and obstruction of phlegm and heat in throat. The treatment methods were reducing heat, eliminating phlegm, nourishing *yin* and soothing throat. He was prescribed the formula mentioned above. After taking drugs for three days, he felt throat comfortable. The disease was cured before the drugs of one course were taken.

8) Psoriasis: the disease usually is caused by that wind and heat pathogens invade into skin and muscle striae, resulting in unsmooth circulation of *qi* and blood, and heat and dryness transformation. The body fluid and blood are consumed, and skin loses nutrition. The main treatment methods usually are dispersing wind, clearing heat, cooling blood, resolving toxin, activating blood and dispersing stasis. Nourishing blood is applied for longy course. This disease is extreme obstinate, so it is hard to acquire therapeutic effect. Dermatology department of Shuzhou TCM hospital creates *si bai san* (*bai jiang can*, *bai hua she*, *zhi bai fu zi*, *bai ji li*) for oral administration and *huang sheng gao* (20% *huang sheng* are mixed with beeswax and sesame oil and then stirred into paste) for external use, which are effective for some cases. 6g of *si bai san* is taken every time, three times a day. *Huang sheng gao* is used twice a day. If the patient is allergic to *huang sheng gao*, the treatment must be stopped. They are suitable for early and middle stages of psoriasis, because *jiang can* can disperse wind, reduce heat, resolve toxin and treat ulcer, *bai hua she* can search wind and dredge collaterals, *bai fu zi* can disperse wind, and *bai ji li* and disperse wind and reduce heat. The drugs to

nourish blood and cool blood are needed for blood deficiency in diseases with longy course.

9) Early stage of mastitis: there are masses in the breast in the early stage of mastitis, usually due to liver *qi* stagnation or obstruction of stomach heat resulting in obstruction of milk. If it did not disappear quickly, pus usually would occur. Powder of *sheng jiang can* mixed with vinegar can be used to cover the focus once a day for the mastitis without redness and swelling of breast skin. Usually the disease would be cured after several treatments.

[case] patient *Cao*, femal, 35. She suffered mastitis for five days (the breast skin was not red and swelling yet). She was prescribed 60g of *sheng jiang can* podwer. 9g of powder was mixed with vinegar and then covered focus every time, once a day. The disease was cured after three days.

10) Asthma: 3g of *zhi jiang can* powder is taken every time, twice a day. It can relieve mild asthma. Because *jiang can* can relieve spasm, stop asthma, eliminate phlegm, stop cough, disperse wind and reduce heat. It is not suitable for deficient and cold types of asthma.

[case] patient *Wang*, male, 8. He suffered asthma for more than three years, which recurred quite often in winter. The manifestations were dyspnea, cough, unable to lie down, loud sputum rales, yellow and greasy tongue coating, slippery and rapid pulse. It was caused by that phlegm and heat in lung obstructed lung meridian and resulted in failure of lung to depurate and descend. 2g of *jiang can* powder is taken, twice a day. The disease was relieved after two days.

11) Severe rheumatoid arthritis: *wu hu tang* (*zhi jiang can* 6g, *zhi quan xie* 6g, *wu gong* 3 strips, *zhi chuan wu* 3g, *zhi cao wu* 3g) is effective for abundant cold and dampness type of severe rheumatoid arthritis which recurs frequently and not cured by many treatments. It should be caution when it is used for *yin* deficient and weak patient. This formula (reduced dose) added with *tian ma*, *bai zhi*, *gui shen* and *niu xi* can be used for infantile paralysis, or added with *pu gong ying*, *di ding* and *jiu li ming* ① can be used for carbuncle and furuncle. One third dose of *wu hu tang* is needed for powder for oral administration, saving drug materials and promoting therapeutic effect.

12) Scar in the later stage of burn: it is written in *bie lu* that *jiang can* can treat scar of carbuncle, indicating that it can soft the scar. The formula is 14 strips of *jiang can* and one chicken egg. Egg is soaked by white wind for seven days, and then egg yolk is picked out to mix *jiang can* powder into paste. The mixture is used to cover scar twice a day. The scar will disappear gradually. Additionally, the drugs to tonify *qi*, cool blood, clear heat, nourish *yin* or supplement kidney should be selected for decoction according to patient's constituent.

13) Breast lobular hyperplasia: It belongs to *ru pi* in TCM, usually due to liver stagnation and dysfunction of *chong* and *ren* meridians. The treatment methods are soothing liver, relieving stagnation, regulating blood, softening hardness and regulating *chong* and *ren* meridians. *Xiao he dang* (*zhi jiang*

can 12g, *feng fang* 9g, *dang gui* 9g, *chi shao* 9g, *xiang fu* 9g, *ju he* 9g, *chen pi* 6g, *gan cao* 3g) can be taken for 5-10 days continuously to acquire therapeutic effect. If the hyperplasia is not cured thoroughly, the drugs can continue to be taken.

[case] patient *Chen*, female, 32, farmer. She suffered mass (as large as chicken egg) in her breasts for more than two years. She received many western medicines and TCM herbs without effect. She was prescribed *xiao he tang*. After taking drugs for four days, the mass was reduced obviously. The disease was cured after taking drugs for eight days.

14) Diabetes: *jiang can* can really reduce the blood sugar of diabetes, however, the pharmacodynamic mechanism needs further researches.

[case] patient *Chen*, male, 46, cadre. He had hepatitis history. In the recent several months, he suffered polydipsia, limosis, polyuria and thin body. Tests showed 260mg% of fasting blood sugar, urine sugar ++--+ and acetone body + of fasting urine. Besides dietary control, he was prescribed capsules of *jiang can* powder. Eight capsules were taken every time, three times a day. The patient also was asked to take half cup of juice of raw *bian xu* (*bian xu* was washed by cold boiled water, cut and then pounded for juice.). After taking drugs for one week, polydipsia, limosis and polyuria improved, urine sugar reduced to ++, and acetone body -. Three weeks later, fasting blood sugar reduced to 125mg%, fasting urine sugar was (-), and polydipsia, limosis and polyuria disappeared. One month later, the condition was good and steady, so he was prescribed *liu wei di huang* (9g every time, twice a day) to enhance therapeutic effect.

Subsidiary drugs: *Can Sha*

Can sha is pungent and sweet in flavor. Ancient doctors consider that its nature is warm and dry, but its nature is quite even in fact. The functions are 1) dispersing wind, eliminating dampness, 2) resolving toxin, dispersing stasis. With the help of drugs which can disperse exterior syndrome, such as *da dou juang*, it can disperse exterior and eliminate dampness, suitable for seasonal diseases accompanied with dampness, manifesting as fever and general pain. *Wang Mengying*, a doctor of Qing dynasty, admires *can sha* that it is the most important drug for cholera, because of the functions of eliminating dampness and resolving toxin. With the help of drugs to resolve turbidity and regulate middle *jiao*, it can treat vomiting, diarrhea and spasm caused by food poisoning, acute gastroenteritis and so on. *Can sha* can also treat some cases of hepatitis, eye disease and skin itching. Additionally, it can disperse stasis and dredge meridians for excessive syndrome of amenorrhea, and the carbonized form of *can sha* can be used to stop bleeding for uterus bleeding. The experiments on mice and chickens prove that it contains lots of VitmA and VitmB, protein, chlorophyll and auxin. There are 13 kinds of dissociative amino acid, such as leucine and histidine. With the growth of silkworm, the proportion of leucine and histidine in *can sha* also rises. Therefore, the therapeutic actions of *wan can sha* (stool of old silkworm) are

better. In “*du zui yi tan*”, *Ji jian yong zhu*, a Japanese doctor, considers *can sha* as a standing drug for old people to avoid wind stroke and tonify body. It is referrible. The functions of this drugs is quite weak, so large dose should be applied, usually 12-24g for decoction. The clinical applications are discussed as follows.

1) Cholera: the onset of this disease is acute and fierce, and is named by the characters of alternation of vomiting and diarrhea and turmoil. It maybe include true cholera in ancient time, but it mainly refers to acute gastroenteritis, food poisoning, etc..

In “*huo luan lun*”, besides odd prescription of only *can sha*, doctor *Wang Mengying* also uses *can shi tang* to treat spasm, cold limbs, abdominal pain, thirst, restlessness, dented eye socket and hidden pulse due to cholera and other acute seasonal diseases. The constitute of *can shi tang* is *wan can sha* 15g, *sheng yi ren* 12, *da dou juan* 12g, *chen mu gua* 9g, *jiang ban xia* 9g, *chuan lian* stir-baked by ginger juice 6g, *huang qin* stir-baked by wine 6g, *jiao shan zhi* 4.5g, *tong cao* 3g and *dan wu yu* 1g, decocted by water. This formula is suitable for heat type of cholera, and *si ni san* needs to be added to restore *yang* to rescue patient from collapse for cold type. Combination rescue methods of TCM and western medicine should be used for severe loss of body fluid due to fierce vomiting and diarrhea.

[case] patient *Cai*, female, 26, worker. Because of improper diet disturbing middle-*jiao* and summer-heat invading from outside, the stomach and intestine was unable to separate clear and turbid substance, resulting in alternation of vomiting and diarrhea, thirst, restlessness, abdominal pain, scant and dark urine, yellow and greasy tongue coating, and rapid and large pulse. The treatment methods are expelling turbidity, stopping disturbance, clearing summer-heat and reducing heat. She was prescribed *can shi tang*, and the symptoms ware relieved a lot after one dose. She was regulated by *huo xiang zheng qi wan* later on.

2) Amenorrhea: there are many causes of amenorrhea, and they can be subdivided into deficiency and excess in clinical practice. The common causes are cold and dampness, resulting in dysfunction of *chong* and *ren* meridians, *qi* stagnation and blood stasis. *Can sha jiu* can treat excessive type of amenorrhea effectively. 120g of *wan can sha* and 750g of *Shaoxing* wine are sealed in jar, then put into boiler and cooked by low fire for one hour. 50g-100g of the drug was taken every evening according to patient's capacity for liquor. After finishing the drugs, the conditions are observed for half month. If there is still no menstruation, another course would begin.

[case] patient *Tao*, female, 25, work. She felt abdominal distention pain and menstruation stopped when she was caught in rain and got cold. She had suffered amenorrhea for seven months, and too much leucorrhea and slight abdominal distention pain. The tongue coating was white and greasy in the middle area of tongue, and pulse was deep, thin and rough. This was due to cold and dampness obstructing uterus, resulting stasis and obstruction of

menstruation. She was prescribed *can sha jiu* for one course. After taking drugs for ten days, the menstruation came and the cycle was normal.

3) Joint pain: Only *can sha* or added into the formula for dispersing wind, eliminating dampness, warming meridians and dredging collaterals is effective for this symptom. Heavy dose of animal drugs should be used for longy duration, such as *yi shen juan bi tang* (seen to Bi syndrome section of *feng fang*), otherwise, it is very difficult to dredge obstruction, soothe collaterals, expel wind and eliminate dampness. Additionally, hot baked *can sha* (wrapped up by cloth) can be used to iron the joint, twice or three times a day. It is quite useful.

[case] patient *Wu*, female, 36, worker. She was in a draught when she was sweating after work, so wind and dampness invaded into body obstructing meridians and collaterals. In the recent three days, she suffered fever, cold body, general joint pain, difficulty to work. The tongue coating was white and greasy, pulse was floating and moderate. She was prescribed modified *xuan bi tang*. *Wan can sha 15g, mu fang ji 9g, sheng yi ren 9g, shu yi ren 9g, jing lian qiao 9g, pian jiang huang 4.5g, chuan gui zhi 4.5g* and *fei hua shi 12* were decocted by water. After taking two doses, all the symptoms almost disappeared.

4) Oppression of chest and abdomen: seasonal diseases accompanied with dampness usually manifests as oppression of chest and abdomen. 90g of *can sha* is decocted, and the decoction is dipped by cloth to iron chest. The symptom would be relieved after using for twice or three times.

5) Profuse uterus bleeding: *ji yin gang mu* uses powder of carbonized *can sha* (swallowed with water) to treat profuse uterus bleeding, 9g every time, three times a day. It is really effective according to clinical verification.

[case] patient *Jia*, femal, 32. She suffered irregular menstruation, and this menstruation had prolonged half month. The manifestations were profuse bleeding, clot, abdominal pain, purple tongue, and thin and rough pulse. This was due to blood stasis, dysfunction of *chong* and *ren* meridians and of unconsolidation of blood sea. The treatment methods were dispersing stasis and stopping bleeding. She was prescribed *can sha tan*, 9g every time, three times a day. The bleeding stopped the next day.

Comment: Raw *can shao* can treat amenorrhea, while carbonized *can sha* can treat profuse uterus bleeding. This is great value of herb processing.

6) Urticaria: doctor *Zhang* and doctor *Yang*, 440th unit of the Chinese People's Liberation Army report that three continuous doses of *can sha yin* (*can sha 30g, dan shen 30g, chong lou 15g, di fu zi 6g, chan yi 6g*) can cure urticaria. It is also effective for cutaneous pruritus, drug rash, pityriasis rosea, acute hand eczema and solar eczema.

Can Jian

Can jian is sweet in flavor and slight warm in nature. It mainly contains fibril protein, sericine protein, elements such as Fe, F, Me and Zn, and has cholinomimetic action. Decoction of *can jian* can treat polyuria and diabetes.

Carbonized form can stop bleeding for bloody stool, profuse uterus bleeding and bleeding due to cervical carcinoma. *Can jian tang* (*can jian 10, dou chi 9g, qing hao 9g*), a folk proved recipe, can treat infantile summer fever with good therapeutic effect. Because *can jian* can nourish fluid and stop thirst, *dou chi* can abate heat and eliminate restlessness, and *qing hao* is good at clearing deficient heat. Proper compatibility of medicines takes obvious therapeutic effect. Carbonize form of *can jian* can be mixed with honey to cure mouth erosion.

Can tui zhi

Can tui zhi also called *gu can zhi* and *can lian*. It is mild in nature. External layer of silkworm egg shell contains polyphenols, and middle and internal layers contain lipid and protein. It can stop bleeding, relieve pain, eliminate carbuncle, resolve toxin, promote urine and control birth. *Can tui zhi* is suitable for followed symptoms.

1) Continuous bleeding, acute laryngeal infection: Carbonized form of *can tui zhi* is made into pills with honey as large as *qian shi*, kept in mouth. (“*ji yan fang*”)

2) Periodontitis, gum carbuncle, mouth ulceration: *Can tui zhi* is burnt and then used to cover focus.

3) Toothache: *Can tui zhi* was burnt and then the ash is used to brush focus. After a while, it is rinsed out the mouth by salt water.

4) Drug poisoning: several *can tui zhi* is burnt and then ash is swallowed with cold boiled water. (“*yi jian fang*”)

5) Stranguria: 6g of *can tui zhi* ash and little *she xiang* is taken with rice water. (“*bo ji fang*”)

6) Profuse uterus bleeding: carbonized *can tui zhi* and baked *huai shi* are grinded into powder with same doses. 6g of powder is taken with *Shaoxing* wine. (“*yi jian fang*”)

7) Bleeding due to hemorrhoid: half piece of *can tui zhi* is burnt and then the ash is taken with wine. (“*bei ji fang*”)

8) Birth control for women: “*qian jin fang*” writes that ash of *can tui zhi* and wine are taken for birth control for all the life. It is reported by Shanghai first people’s hospital and Shanghai third Chinese pharmaceutical factory that animal tests show no therapeutic effect of *can tui zhi* for birth control, but 30 cases of clinical observations shows that birth control rate is 80% after taking five cycles of drugs (3g ash of *can tui zhi* is continuously taken for three days after menstruation). Folk also uses this method. It is worth further practical observation.

Can yong

Can yong is warm in nature, sweet, pungent and salty in flavor, and is good at treating diabetes, restlessness and infantile malnutrition. In the recent years, *jiang yong*, made from fermented *can yong* by *Beauveria bassiana* (Bals) Vuill, can replace *jiang can*, and also have depressant action and anticonvulsive action. Wuxi second people’s hospital uses defatted *jiang can*

tablet to treat 100 cases of different epilepsies ②. The results are 26 cases of obvious improvement, 51 cases of improvement and 23 cases of no avail. The effect rate is 77%. The adults take 1.5g-3g of defatted *jiang can* tablet (0.3g/tablet) every time, and the children between 1-5 years old take 0.3-0.6g, between 6-10 years old take 0.6-0.9g every time, three times a day. 15 days constitute one course of treatment. The drug can be taken continuously. If there is no recurrence after taking drug for more than half year, the dose can be reduced to 2/3 of original dose gradually, and the left 1/3 dose is maintenance dose, which should be taken continuously for more than 1-2 years. It is effective for original grand mal with duration shorter than 4 years and the patient is younger than 30 and the. Usually after four courses of treatment, some therapeutic effects would occur. Larger dose, better therapeutic effect. There are usually no side-effects in long-term administration.

Pharmic researches show that *can yong* contains chitin and protein. Clinical observation and animal experiments show that it has obvious anti-convulsive action and relieve-spasm action. It can rise serum albumin, reduce total cholesterol and improve liver function both of human and animals. Therefore, it can treat fatty liver and diabetes, also is suitable for chronic hepatitis and early stage of hepatocirrhosis. *Jiang yong* also can treat parotitis, upper respiratory tract infection, chronic bronchitis, enuresis, urticaria, cervical lymphadenitis, hematuria due to nephritis, lung tuberculosis, etc..

① *jiu li ming*: bitter and astringent in flavor, slight cold in nature. The functions are improving vision, removing nebula, clearing heat, resolving toxin, promoting granulation, removing putrid tissue. It can treat carbuncle, furuncle and ulcer.

② clinical observation and effect analyze of defatted *jiang can* tablet on epilepsies, Research Reference of TCM 1:60. 1974.

4 *Zha Chan* (cicada) *Chan Yi* (exuviae of cicada) (Subsidiary drug: *chan hua*)

Zha chan is the whole body of *Cryptotympana atrata* Fabricius. The exuviae of cicada is called *chan yi*. The dead body of larva, which is died of infection by conidium of *Cordyceps cicadae* Shing, is called *chan hua*. All of them can be used as drugs. They are produced in many provinces of south China. *Zha chan* is salty and sweet in flavor, and slight cold in nature; *chan yi* does not have flavor, and slight cool in nature. They are attributive to lung, liver and kidney meridians.

The record of *zha chan* can date back to “*nei jing*”, which says that it can treat infantile convulsion, night cry and epilepsy. So the use of *zha chan* is earlier than *chan yi*. It is pity that *chan yi* is common used, but *zha chan* almost is not used. *Chan yi* is good at dispersing wind and heat, and promoting eruption, while *zha chan* is expert in dispersing wind and stopping spasm. The spasm which is due to fright and heat which is due to wind and phlegm, and epilepsy and depressive psychosis which due to fright and

phlegm, can be treated with *zha can*. The mechanism of therapeutic effect is its dispersing action that can disperse the clear *yang* in *yin* and then results in the spontaneous dissipation of accumulated turbidity, just as doctor *Zhou Shu* said in “*be jing su zheng*”. The folk often catch *tang lang* (mantis) when it is eating *zha chan* and then dry it in the shade. It is used to prevent and treat tetanus neonatorum, because *zha chan* and mantis has the functions of stopping spasm and convulsion. Roasted *Zha chan* can be ate to treat chronic aphonia.

Chan yi is light, slight cool in nature, is good at resolving exogenous wind and heat, also can stop convulsion and spasm, and is an important drug for the beginning of warm diseases. A famous doctor of warm diseases in Qing dynasty named *Yang Lishan* said, it is so light, clear and nimble that it is a panacea for blood diseases, and it can disperse wind, eliminate dampness, clear heat and resolve toxin. Therefore, among the main formulas which treats warm-heat diseases in “*han wen tiao bian*”, there are twelve formulas using *chan tui*. The mechanism for *chan yi* to disperse wind and heat perhaps is that it can selectively inhibit hyperactivity of thermotaxic centers, expand the vessel and accelerate blood circulation of skin and increase the secretion of sweat gland, resulting in the increase of heat dissipation and regulation of body temperature. It not only disperse exogenous wind, and also stop endogenous wind, achieving the aims of stopping convulsion and spasm ①. It also is expert in promoting eruption, so it can treat the measles and chicken pox which fail in having eruption. However, if the heat pathogen has gone into *ying* and blood phases, such as petechia in many kinds of febrile diseases, no matter whether the eruptions appear or not, large dose of drugs for cooling blood and resolving toxin should be applied. If *chan yi* was misapplied to disperse exterior, *qi* would be consumed, blood would be disturbed, petechias would be more, and disease would be severer. The eruption should not be promoted if other pathogenic factors transform into fire, such as lung heat, heat fecaloma with watery discharge and dry stool. Otherwise, the disease would be severer.

“*Yin hai jing wei*” considers that it can disperse wind, resolve toxin, remove nebula, stop tears and dissipate pathogen, so there are more than ten formulas using *chan yi* among many formulas for treating redness, swelling and pain of eyes due to liver heat, eye pain due to *xie jing* (cornea perforation and ridoptosis), white membrane covering eye, etc.. It shows that *chan yi* also is effective to eye diseases.

Chan yi contains large amount of chitin and so on, can reduce the tensility and reactivity of striated muscle, and block the conduction of sympathetic ganglion. Therefore, the function of stopping convulsion and spasm is powerful, and it is often used to treat such diseases as tetanus. In the recent years, it is also confirmed to be effective to angina pectoris.

Except doctor *Zhang Chunxi*, no doctors mentioned its function of promoting urine. Clinical practice also proves this function. It is reported, with

the help of *su ye* and *yi mu cao*, that *chan yi* can reduce the urine protein of chronic nephritis at some degree. This is a new discovery too.

Chan yi can treat itching due to favus, ringworm, rash and urticaria with the help of *she tui*, and treat raucity due to lung heat with the help of *pang da hai* (composing *hai chan san*). The combination use of *chan yi* and *jiang can* can enhance the functions of expelling wind and reducing heat. *Chan yi*, *jiang can*, *gou teng* and *quan xie* can treat spasm and twitching due to liver heat and wind. *Chan yi*, *jiang can*, *ju hua*, *bo he* and *bai ji li* can treat exterior syndrome due to wind and heat of itching in urticaria. *Chan yi*, *jiang can*, *xing ren* and *bei mu* can treat pertusis.

The head and feet are accustomed to be cut when it is processed. However, animal tests show that the head and feet of *chan yi* is good at abating heat, and the body of *chan yi* is good at stopping spasm which has synergetic effect with pelltobarbitalum natricum. Therefore, it is unnecessary to cut head and feet when it is used to expel wind, reduce heat and play sedation action. But it is necessary to cut head and feet when it is used as anticonvulsants.

Lack of wind heat and much sweating due to exterior deficiency are contraindications. For decoction, 3g to 6g of *chan yi* is used for expelling exterior syndrome and promoting rash, and 15g to 30g for expelling wind and tranquilizing convulsion. Reduced dose is used for powder. The clinical applications are discussed as follow.

1) Infantile convulsion:

(1) *Di jing san*: *dan xing* 4.5g, *hu huang lian* 4.5g, *quan xie* 4.5g, *qiang hu* 4.5g, *tian zhu huang* 4.5g, *hu po* 4.5g, *fang feng* 4.5g, *huang qin* 4.5g, *tian ma* 4.5g, *jiao shan zhi* 6g, *duan long chi* 6g, *lian qiao* 6g, *chuan bei* 9g, *da huang* 9g, *duan chi shi* 9g, *jiang can* 9g, *da zhe shi* 9g, *duan qing meng shi* 9g, *duan shi jue ming* 9g, *fei zhu sha* 15g. They are grinded into powder and put into abdomens of 30 live cicadas (wing and feet are not cut off.) with same dose. They are dried in the shade after being tied closely by thread. Then they are stir-baked, grinded into powder and mixed with 1.5g of *she xiang*. After being stirred into well distribution, the powder is sealed off into porcelains. The dose is 0.7g for two-year-old children, three times a day. 0.15g of powder is added for one age if the children are older than three years old. This formula can expel wind, eliminate phlegm, reduce heat and stop convulsion, treating infantile food stagnation and exogenous wind which manifest as fever, sweating, frequent convulsion and spasm, opisthotonos, strabismus or superduction, sipping lip, frequent protrusion of tongue, etc..

(2) *xiao er jing feng tui re san* (powder for abating heat of infantile convulsion): *chan yi* 60g, *ji nei jing* 12g, *tian zhu huang* 12g, *gou teng* 12g, *chen pi* 9g. They are grinded into powder and stored in bottles. The dose is 1g for the children about two-year old (or 0.1g per 1kg of weight), three times a day. This formula can reduce heat, stop convulsion, eliminate phlegm and regulate middle-*jiao*, treating infantile convulsion, fever and dyspepsia.

[case] patient *Huang*, female, 4. Due to invading of wind and cold and food stagnation, she suffered high fever for three days. The manifestations were sweating, red face, rough breath, restlessness, frequent convulsion in the evening, sipping lip, frequent protrusion of tongue, no stool for two days, white and greasy tongue coating which was slight yellow in the middle of tongue, slippery and rapid pulse, blue and purple finger vein which exceeding *Qi* pass. It was resulted from combination of pathogenic factor and food stagnation which generate heat which generates wind which causes convulsion. She was prescribed three parcels of *ding jing san*, one parcel (1g) every time, three times a day. After taking the first parcel, restlessness disappeared and vomiting was relieved. After taking the second parcel, stool (amount was quiet much) was discharged smoothly, red color of face was reduced, breath was normal and she felt sleepy. After taking the third parcel, she fell asleep, body temperature descended gradually and convulsion never reoccurred. She was cure after being regulated.

2) Tetanus: (1) Doctor *Fu Qingzhu* invents *chan yi jiu* for tetanus, that is, 15g to 30g of *jing chan yi* is decocted with 150g of Shangxing wine and water, or 9g of *chan yi* powder is taken with Shangxing wine. According to clinical observation, it is effective to mild case. As for severe case, *quan xie*, *jiang can*, *zhi nan xing*, *tian ma* and so on should be added.

(2) Empirical formula for tetanus: *chan tui* 9g, *quan xie* 9g, *jiang can* 9g, *qiang huo* 9g, *fang feng* 9g, *zhi chuan wu* 9g, *zhi cao wu* 9g, *bai fu zi* 9g, *tian ma* 9g, *bai zhi* 9g, *dan xing* 9g, *da huang* 9g, *ban xia* 9g, *gan cao* 9g, *wu gong* 3 strips. 450 ml of decoction is taken by three times a day. Additionally, *Hu po* 3g and *zhu sha* 3g are grinded into powder, and was taken with the decoction. Usually, mild case needs 3 to 5 doses, medium case needs 5 to 7 doses, and severe case needs 7 to 10 doses. *Zhu sha* can be removed according to the condition if the patient takes more than 7 doses, and *da huang* can be removed for severe diarrhea. Surgical department of Beijing capital hospital has successfully cured 16 cases of tetanus by this empirical formula and western medicine since 1964 ②. The formula has anticonvulsants, phlegm-removing and antifebrile actions. The advantages are less doses of tetanus antibody and anticonvulsants, less tracheotomy, convenient nurse, and less pain for patient. This method is much simpler and more effective than former methods.

3) Edema: all the edema and wind-water diseases can be treated by *chan jin san*. *Chan yi*, *ji nei jin* and *che qian zi* are grinded into powder with same dose. 6g of powder is taken with water every time, twice a day. It can eliminate water and abate edema. The author once used this formula to treat edema due to malnutrition (hunger edema) in 1961. The edema was abated quite quickly, but not persistently due to his weak constitution. So, *mian hua jie gen* (or replaced by *sheng huang qi*), *ai ye*, *chi xiao dou*, etc., were added and received good therapeutic effect.

[case] patient *Ren*, female, 42. She suffered chronic diarrhea for more than

one year. In the recent three months, edema of face and feet occurred quiet often, and swelling abdomen appeared sometimes. She was thin. Urine test was normal. The tongue was pale and large, coating was thin and white, and pulse was thin and soft. This was due to the failure of spleen to control water, and belonged to hunger edema. She was prescribed *chan jin san*, which was taken with decoction of one *mian hua jie gen* and 9g of *ai ye*. After taking drugs, the urine amount rose and edema disappeared gradually. The edema was cured after three days. She was cured after being regulated by *shen ling bai zhu san*.

4) Pertussis: it is an obstinate and spasmodic cough. Usually *du ke san* can be used to treat it with good effect. The formula is *chan yi 6g, jiang can 6g, qian hu 6g, sheng shi gao 4.5g, xing ren 4.5g, chuan bei mu 4.5g, hai fu shi 4.5g, liu zhou zi 1.5g, bei xi xin 1.5g, chen dan xing 1.5g*. They are grinded into powder, 0.3g for one age, four or five times a day (every three hours). The drugs are taken with white sugar water. After taking drugs for two days, the symptoms would begin to be relieved. The disease would be cured after five or six days.

[case] patient *You*, female, 6. She suffered pertussis for more than ten days. The manifestations were slight dropsy face, frequent cough with red face, rapid breath and discharge of tear and snivel, vomiting sometimes. She was treated but without effect, so *du ke san* was prescribed, 2g every time, four times a day. The symptoms were relieved a lot the next day, and was cured after five days.

5) Prolapse of the anus: the powder of *chan yi* is stirred into paste form with sesame oil. They are used to cover focus and squeezed in anus. Usually the disease would be cured after using drugs for several times. *Bu zhong yi wan* should be taken at the same time for weak patient so as to enhance the therapeutic effect.

6) Dysphasia as a sequelae of encephalitis B: Shenyang infection disease hospital uses *tong qiao fa yin tang* to treat this disease with 85% of cure rate. The formula is *chan tui 12g, cang pu 12g, mai dong 12g, tian zhu huang 12g, ju geng 3g, yuan shen 3g, gan cao 3g, sheng di 15g, lian qiao 15g, chao shan zhi 6g, she gan 6g, zhu ru 30g*. They are decocted by water into 240ml, 80ml for adult every time, three times a day. The dose should be reduced for children. This formula can dredge orifice, soothe throat, nourish *yin*, regulate lung, clear heat and resolve toxin, and is quite suitable for this disease. It is worth learning.

7) Beginning of *dui kou* and *da bei*: *dui kou* and *da bei* belong to carbuncle, so *dui kou* is also called neck carbuncle, and *fa bei* is also called back carbuncle. They are usually caused by stagnation of dampness and heat, and obstruction of *qi* and blood. At the early stage when they have not putrefied, powder of *chan yi* and *wu gong* with same dose which is mixed with honey or vinegar can be used to cover the focus. The drugs are used once a day. After several days, the carbuncle will be cured. The effect is obvious because *chan*

yi is good at expel wind, eliminate dampness, reduce heat and resolve toxin, which are assisted by *wu gong* functions of dispersing stasis and resolving toxin.

8) Asthma and urticaria: some kinds of asthma and urticaria belong to allergic diseases, so there is something common in therapy. *Qu feng ding chuan wan*: *chan yi* 15g, *huang jing zi* 15g. They are grinded into powder and made into pills with honey, 6g (reduced dose for children) every time, three times a day. The effect is quite good. The author once used it, and felt the effect is quick. The dose can rise to 9-12g for outbreak, or otherwise small dose is enough, three times a day. *Chan yi* not only expel wind, clear heat, and also have anticonvulsants, spasmolysis and antiallergic actions, so they effective.

9) Cornea nebula: keratitis usually is caused by wind and heat of liver meridian going up. Frequent recurrent usually results in nebula. The treatment methods are nourishing *yin*, soothing liver, clearing heat, expelling wind, regulating blood and abating nebula, and modified *bo yun tui yi wan* can be used. The formula is *chuan xiong* 45g, *chan yi* 15g, *ju hua* 15g, *mi meng hua* 15g, *man jing zi* 15g, *mu zei cao* 15g, *zhe shi zi* 15g, *jing jie sui* 15g, *di gu pi* 15g, *wei ren rou* 15g, *huang lian* 15g, *gan cao* 15g, *sheng di* 30g, *gou qi* 30g. They are grinded into powder and made in pills as large as phoenix tree fruit with honey. 6g of pills is taken every time, twice a day. *Bu zhong yi qi wan* or *qi ju di huang wan* can be added for weak body.

[case] patient *Zhang*, female, 24, farmer. She suffered cornea nebula of left eye after measles when she is five years old. Eyesight was quite poor, only seeing hand moving in front of eyes. The tongue was slight red, coating was thin, and pulse was thin and wiry. She was prescribed *bo yun tui yi wan*. Before the drugs were finished, the eyesight promoted to 1.2. She was asked to take *qi ju di huang wan* to enhance the effect after *bo yun tui yi wan* were finished.

10) Hemorrhoid: processed *chan yi* 7 and *hu tao* 7 are grinded into powder and taken with Shaoxing wine for 7 to 10 days. It is suitable for pain due to internal hemorrhoid. The meanings of the formula are that *chan yi* is good at going into blood phase, can expel wind, eliminate dampness, reduce heat, resolve toxin, eliminate swelling and relieve pain with the help of Shaoxing wine's functions of activating blood and dispersing stasis, and *hu tao* can tonify kidney and moisten intestine, benefiting for the recovery of hemorrhoid.

[case] patient *Liu*, female, 39. She suffered constipation for long time, and felt internal hemorrhoid pain, which was aggravated by stool discharge. Because afraid of surgery, she asked for medicine. The formula mentioned above was tried, and effect appeared after three days. The disease was cured after eight days.

Additionally, *Yuncheng* people's hospital of Shanxi province introduces *can tui san* for treating hemorrhoid, that is, 33g of *chan tui* powder and 33g of *jiang can* powder are separated into 15 shares. One share of the powder is

filled into a chicken egg which has a small hole and then sealed off by adhesive plaster. The egg is cooked and ate in the morning before meal. 15 days compose one course of treatment.

[case] patient *Wang*, male, 51, No. 59634, local people of *Yuncheng*. He was hospitalized for artery cirrhosis, gastrointestinal disease and hemorrhoid. Physical test showed red and swelling anus and combined hemorrhoid at 3 o'clock position. He felt itching of anus. The method mentioned above was applied for one course of treatment, and callback showed no hemorrhoid. All effect was good for another 15 cases. It is worth popularizing.

11) Allergic diseases: doctor *Wang Jinyun* uses *ma huang chan yi tang* ③ to treat 39 cases of allergic diseases, such as urticaria, eczema, drug rash, varnish allergy, etc.. The effect is quite satisfied, 37 cases are cured, 1 case is improved, and 1 case does not receive effect. The formula is *ma huang 4.5g, chan yi 6g, fu ping 6g, huai hua 6g, huang lian 3g, gan cao 3g*. They are added with 1200ml water and then decocted into 400ml for the first decoction. 600ml Of water is added into drugs residue and then decocted into 200ml for the second decoction. The first and second decoction are put together and stirred into well distribution. They are taken by twice a day.

[case] patient *Yang*, male, 22, cadre, No.15946. He was hospitalized on 5th, September, 1958. The chief complaint was rash all over the body for more than 7 days. There ware no obvious inducements. The rash appeared from forearm to the whole body. The eruption was as large as millet, red and slight hard papula, extreme itching. There were blisters which were surrounded flush as large as soybean, and some of them had yellow and brown slough and golden extravasate. The body was a little dropsical. After being hospitalized, he was prescribed modified *huang ma chan yi tang*. After taking five doses of drugs, he was cured.

12) Silicosis: silicosis is a chronic occupational disease resulted from long inhalation of large amount of silicon dioxide powder. The original names of silicosis are *shi lao* and *mei gong fei lao*. The main symptoms are chest pain, chest oppression, cough with sputum and progressive dsypnea, which are caused by that powder deposits in lung meridian, obstructs *qi* circulation and then results in dysfunction of descending and depurating. Regular treatments usually receive little effect. Here, an empirical formula for silicosis, which consists of *chan yi* and other drugs, is applied for clinical reference, that is, *di huang 30g, bai ji 18g, chan yi 18g, fang ji 12g, jing jie 6g, gan cao 6g*, one dose very day.

13) Cysticercosis: cysticercosis is resulted form parasitism of larva of tapeworm (measle) in certain part of body. Incidence rate of brain cysticercosis is highest, about more than 80%. Measle usually locates in motor area of cortex, so epilepsy is a common syndrome. Doctor *Hong Zuofan* follow the ruler of syndrome differentiation that epilepsy is branch and measle is root, and invents *xiao nang ding xian san* ④ which can expel wind, stop epilepsy, kill worm and eliminate vesicle. He treats 9 cases, of which 6

cases are cured and 3 cases are improved.

The formula is *chan tui* 75g, *quan xie* 50g, *gan cao* 25g, *hu po* 20g, *zhu sha* 15g, *bing pian* 5g (mixed later). They are grinded into powder, and 3.5 to 5g is taken with cool boiled water every time, twice or three times a day.

[case] patient *Lu*, male, 27, worker.

History: he once got tapeworm, and developed cysticercosis in 1971, which was testified by pathological test twice in Shengyang medical college. Both western medicine and herb were prescribed but without any improvements. He came to our hospital in 1973.

First visit on 11th, February: he had epilepsy once half year before, and another one in recent month. He felt fatigue, sleepy, vertigo and discomfort.

Test: there were some subcutaneous tapeworm nodes in left arm, hard and moveable, no redness, no swelling, painless and various sizes. The pulse is deep, moderate and weak. The tongue is slight red without coating. The spirit was low and body was thin. The syndrome was spleen and stomach deficiency, however, the spasm was due to tapeworm in brain, resulting in meridian obstruction of brain. The disease was urgent, so the branch should be treated at first. *Xiao nang ding xian san* was prescribed for one course.

Second visit on 2th, march: there was no epilepsy after taking drugs, the nodes became fewer. The pulse was moderate, spirit was good, and the tongue was pale without coating. The drug was prescribed for another course.

Follow-up in April, 1977, showed that the nodes disappeared after taking two courses of drugs. the epilepsy had not reoccurred for four years. The symptoms, such as fatigue, vertigo, sleepy, etc., disappeared, and he had been working again for four years.

14) Unsmooth appearance of rash: *chan tui* 3g, *yuan sui* 9g, *fu ping* 9g, *jing jie* 6g. They are decocted with water for administration. The decoction also can be used to cover the focus when it is warm.

Subsidiary drugs: *chan hua*

Chan hua is sweet in flavor, and cold in nature. It can expel wind and heat, stop convulsion and spasm, and promote eyesight and abate nebula. It can treat infantile night cry with the help of *gou teng*, *bai shao*, treat convulsion and spasm with the help of *zhi quan xie*, *zhi jiang can*, *guang di long*, and promote eyesight and abate nebula with the help of *mi meng hua*, *gu jing zhu*, *ju hua*. The dose is 3g to 6g.

Comment: although both *jiang can* and *chan yi* has functions of expelling wind, reducing heat, stopping convulsion and relieving spasm, *jiang can* also can eliminate phlegm, soften hardness, resolve toxin and treat furuncle, while *chan yi* also can promote eruption and stop itching. These are their differences in the common functions.

① pharmacological actions of different part of *chan yi*, Date Selections of Jiangshu new medicine college, 2:101,1975

② Medical Research and Communication of Chinese medical academy 6:39, 1972

③ *ma huang chan yi tang* on allergic diseases, Traditional Chinese Medicine Journal 7:217, 1964

④ nine cases of clinical observation on *xiao nang ding xian san* treating, Liaoning Traditional Chinese Medicine, 2(38),1978

5 *Di bie chong* (ground beetle)

Di bie chong is dried body of *Eupolyphaga Sinensis* Walker. It is called *zhe chong* in ancient times, and *tu yuan* in north china. Its popular name is *tu bie chong*. Usually female body is used as drugs, but male body also can be used as drugs. It is produced in every province. It is salty in flavor, cold in nature, and attributive to liver meridian.

Additionally, the functions of *shui bie chong* of Dytiscidae, which is also called *dong fang qian long shi* ①, are different from *di bie chong*. They can not be confused. However, some drugstores of Jiangsu province give *di bie chong* to patient if doctor prescribes *di bei chong*, and give *long shi* if doctor prescribes *zhe chong*. It should be corrected.

The functions of *di bie chong* are (1) activating blood, dispersing stasis, (2) eliminating mass, softening hardness, (3) treating trauma, relieving pain. All the diseases, such as amenorrhea due to blood stasis, mass, trauma and pain due to stasis, can be treated by *di bie chong* with good effect. The characteristics are breaking stasis but not fiercely, and activating and regulating blood. "*chang sha yao jie*" says that it is good at dispersing stasis and also is expert in replenishing injuries. Therefore, weak patient also can be treated by *di bie chong*, such as *da huang zhe chong wan* for amenorrhea due to deficiency, *xia xu xue tang* for pain after childbirth, and *bie jia jian wan* for spleen swelling due to malaria. Because it is good at injuries from falls and trauma and can promote reunion of tendon and fractured bone, it is often used in traumatology. "*ben cao cong xin*" says that swollen tongue would disappear right away if the decoction is kept in mouth, and milk would be much quickly if the decoction is taken. From this, it can treat doubled tongue, swollen tongue and lack of milk. 6g of *di bie chong* and 3g of salt can be grinded into powder together and taken for swollen and rigid tongue. It can be used with *da huang*, *tao ren* and *hong hua* for abdominal pain due to amenorrhea, and with *dang gui*, *liu ji nu*, *xu duan*, etc., to treat low back sprain which has long duration and prickly pain.

Di bie chong (2g of raw drugs/ml) can inhibit leucocyte of leukemia in test tube by using Methylene blue dye. *Di bie chong* can be selected according to syndrome in clinic and the effect should be observed further.

If it is stir-baked with Shangxing wine, the functions would be promoted. The dose usually is 6g to 12g for decoction, and 1g to 2 g for pills and powder. Additionally, live *di bie chong* can be pounded and then used to cover focus. Lack of blood stasis and pregnant women are contraindications. The clinical applications are discussed as follows.

1) Chronic hepatitis: according the rule that longy pain is usually caused by stasis and deficiency, and the mechanism of liver *qi* stagnation and blood

stasis, the author once invented *fu gan san*, whose main drug is *di bie chong* for chronic hepatitis and early stage of liver cirrhosis which has longy liver swelling, frequent hypochondriac pain. After taking drugs for more than one month continuously, the patients usually receive effect. This formula not only can relieve pain, and also can lessen swollen liver, promoting the recovery of liver function, increasing the amount of plasma protein, and regulating the rate of albumin and globulin. The formula is *zhi di bie chong 30g, tai zi shen 30g, zi he che 24g, guang jiang huang 18g, guang yu jin 18g, shen san qi 18g, ji nei jin 18g*. They are grinded into powder, 3g every time, twice a day before the meals. Or the powder can be made into pill as large as mung bean with the decoction of *hu zhang 120g, shi jian chuan 120g* and *nuo dao gen 120g*. The formula can both reduce pathogenic factors and tonify healthy *qi*, attacking pathogenic factors but not injuring healthy *qi*, and supplementing healthy *qi* but not obstructing middle-*jiao*. Therefore, it can cure or relieve such diseases as weakness, hypochondriac pain, mass, etc., gradually. After being reported, it was applied by many hospitals to treat chronic hepatitis and early stage of liver cirrhosis with good effect.

[case] patient *Zhao*, male, 35, teacher. He suffered hepatitis for one and half years. The liver overstepped ribs for 4cm and had medium texture. Prickly pain of chest and hypochondrium was mild and sometimes was severe, and it can be aggravated by activity. He felt fatigue after a few activities. The liver function was not good. He also suffered poor and dreamy sleep, poor appetite, abdominal distention after meal, and frequent fart. The tongue was purple, coating was thin and white, and pulse was wiry and thin. It was due to deficiency of healthy *qi* and stagnation of pathogenic factors, resulting in liver oppression, *qi* stagnation, blood stasis, mass formation and dysfunction of spleen. The treatment methods was activating blood, dispersing stasis, supplementing *qi*, activating spleen, soothing liver and resolving stagnation. *Fu gan san* was prescribed for one course of treatment. After taking drugs, the pain of chest and hypochondrium disappeared, liver overstepped ribs for 2cm and had soft texture, appetite was promoted, the spirit was good and weight increased. After he taking *fu gan san* for another course, liver overstepped ribs for 2cm and the liver function was good. Then he was treated by supplementing liver and kidney.

2) Coma due to trauma: *hui sheng dan*, a empirical formula which mainly composes live *di bie chong*, can activate blood, dispersing stasis, treat injury, relieve pain, open orifice and restore spirit, treating injury due to falls, pressure and beat, knife wound, bullet wound, severing throat, and coma due to hang oneself, fright and drown. The effect would be more obvious if the patient discharges purple-blood-like stool after taking drugs. It is recorded that the pallet brought more than hundreds of people back to life which was hurt in earthquake of *Chizhou* on 22th, April, 1830. It also brought many seriously wounded people back to life which was coma during "1.28" incident of anti-Japan war. The formula is live *di bie chong* (male live *di bie chong* is cleaned

and then its feet is cut off. It is stir-baked into yellow color by mild fire on the title and then grinded into powder.), *zi ran tong* (it is baked into red color on the title by wood charcoal and then is quench by good vinegar. The process is repeated nine times, and then it is grinded into powder), *zhen ru xiang* (30g of *zhen ru xiang* and 7.5g of lampwick are baked together and then grinded into powder. The powder of lampwick is blow off for refined *xu xiang*.), *chen xue jie*, *fei zhu sha*, *ba dou* (*ba dou* is grinded without the shell and then pressed in paper bag for several times in order to get rid of oil. The refined powder is used.), *she xiang* (mixed later). They are grinded into powder and then sealed off in small bottles. The dose is 0.5g for adults and 0.25 for children. The drugs are taken with wine, or nasal feed for lockjaw. Severe cases can take drugs twice continuously. After resuscitation, the patient should avoid wind and been taken good care. It is due to remained stasis if the patient feels heart and abdominal pain after resuscitation, and he should quickly take 60g of refined white sugar which is dissolved by hot Shaoxing wine or boiled water. Practices confirm that the formula is quite effective. “*shou shi xin bian*” records many cases.

Zhi shang yi hao fang (treat—injuries tablet No.1), formulated by *longhua* hospital of Shanghai TCM college, also considers *di bie chong* as main drugs. The formula can disperse stasis, activate blood, relieve pain and regulate collaterals. *Di bie chong* 1200g, *zhu jie bai fu zi* 1200g, *dang gui* 900g, *chuan xiong* 900g, *hong hua* 600g, *fang feng* 600g and *jiang fan sheng nan xing* 600 are grinded into powder and made into tablets. Every tablet weights 0.3g. The dose is 10 tablets every time, twice a day.

3) Bone fracture: *Di bie chong* is good at treating fracture, can promote reunion of tendon and fractured bone and promote the growth of poroma, which has already been confirmed by many clinical date. 181th hospital of the Chinese People’s Liberation Army and Guangxi plant research institute use *jie gu tang* to treat 19 cases of limbs fracture (after orthomorphia of malformed bone union and hip-joint fusion) with western medicine. The average time of poroma growth is 17 days, and average cure time is 32 days. The formula is *gu sui bu* 15g, *dang gui* 15g, *zi ran tong* 15, *di bie chong* 6g, *xue ji* 6g, *ru xiang* 9g, *da wu jia pi* 9g, *mo yao* 9g, *er cha* 9g, *hong hua* 9g and *chen sha* 6g. It is suitable for compound and closed fracture after taxis. They are decocted by water, one dose every time. Patient is not allowed to eat chicken during treatment course.

Additionally, *Dexing* lead and zinc mine staff hospital of Jiangxi province introduces the followed formula to treat more than 50 cases of bone fracture with 28 days of average cure time. the formula is *di bie chong* 12g, *nan ling yao hua* 4.5g, *gu sui bu* 4.5g, *dang dui* 4.5g, *niu xi* 4.5g, *sang zhi* 6g, *di long* 6g, *hong hua* 6g, *qian cao* 3g, *mu gua* 3g. They are grinded into powder and made into ointment form with rice wine and brown sugar. It is used to cover the focus after union, and changed every four days. The author considers that the effect may be promoted and the course of treatment may be shortened if

the patient receives both the ointment and *jie gu tang* for oral administration.

There was an earthquake in Tangshan and Fengnan on 28th, July, 1976. Nantong city received some patients in the early August. Our hospital received patients of rib, pelvis and limbs fracture. Besides union, they prescribed *jie gu xu jin he ji*. The formula is *zhi di bie chong 9g, zi ran tong 15g, gu sui bu 15g, dang gui 4.5g, chuan xiong 4.5g, xu duan 12g, hong hua 9g, chi shao 9g, gan cao 4.5*, one dose every day. It can disperse stasis, activate blood, eliminate swelling, relieve pain, and reunion of tendon and fractured bone, promoting the growth of poroma. The most patients' poroma grow and union in three to four weeks.

5) Ectopic pregnancy: hard abdominal mass in ectopic pregnancy after the acute abdominal pain and bleeding are relieved can be treated mainly by *di bie chong* with the help of drugs for dispersing stasis, softening hardness and relieving pain with some effects. Professor *Cao Xiangping's* empirical formula is wine-baked *di bie chong 3, pao shan jia 9g, tao ten ni 9g, zhi hai zao 9g, dang gui 9g, yan hu suo 9g, mo yao 6g, duan mu li 30g*, one dose every day, twice per day. After taking for 4 to 7 days, masses of some patients can disappear.

5) Hydrophobia: hydrophobia patients usually have maniac psychic symptoms. In light of interior stasis and heat resulting in maniac of *Zhang zhongjing's* teaching, contemporary doctors advocate *xia xu xue tang* to treat hydrophobia, so as to disperse stasis, promote growth of blood, reduce factors and resolve toxin. Clinical observation shows it has some effects. The formula is *di bie chong 7* (baked without feet), *sheng da huang 9g, tao ten 7* (without skin and tine). They are decocted with 9g of white honey and one bowl of Shangxing wine. It also can be decocted with water for nondrinker. The dose should be reduced for children, and pregnant women can not take it. After taking drugs, the patient would discharge fish-intestine-like or pig-liver-like substance, and the urine is red and dark. The patient should take drugs continuously until the stool and urine are normal. The pill form also is good, that is, *sheng da huang 15g, sheng tao ren 15g, di bie chong 21*. They are grinded into powder and made into pill with honey as large as phoenix tree seed, 9g every time and once everyday. They are taken with Shangxing wine.

6) sequela of cerebral concussion: the common symptoms of sequela of cerebral concussion are vertigo, headache, poor memories, fatigue, poor eyesight, general pain which aggravated by weather changes, poor appetite and sleep sometimes. Due to *qi* stagnation and blood stasis, the complexion usually is dark, tongue has petechia, and the pulse usually is deep and rough or thin and rough. As for syndrome differentiation, it belongs to deficiency mingled with excess. Because of deficiency, supplementing *qi* and blood, and nourishing liver and kidney should be applied. Because of excess, dispersing stasis and activating blood should be applied for *qi* stagnation and blood stasis. Therefore, *jian nao san* is formulated, that is, *hong ren shen 15g* (or replaced by *tai zi shen 30g*), *di bie chong 21g, dang gui 21g, gou qi 21g, zhi*

ma qian zi 15g, *chuan xiong* 15g, *di long* 12g, *zhi ru xiang* 12g, *zhi mo yao* 12g, *zhi quan xie* 12g, *zi he che* 24g, *ji nei jin* 24g, *xue jie* 9g, *gan cao* 9g. They are grinded into powder, and 4.5g of powder is taken both in the morning and evening with water. It can be taken continuously for 2 to 3 months.

Comment: *ma qian zi* also is called *fan mu bie* and is fierce toxic. The effect is closed relative to processing. Usually it is soaped in water, removed hair, dried in sunshine and then deepfried in sesame oil. With mild fire, it becomes white and can easily results in toxin effects such as vomiting. With high fire, it is carbonized and becomes black losing therapeutic effect. Therefore, one *ma qian zi* can be cut off when they are processed. It is the most suitable when the internal part of *ma qian zi* becomes mauve.

[case] patient *Li*, male, 42, soldier. His head was beat by dropping iron truncheon when he was checking construction. The head bone was dented and hematoma appeared immediately. He got coma for more than 20 hours and resuscitated after rescue. The examination in Beijing showed his brain shrunk one quarter. The manifestations were vertigo, headache, quite poor memories (forgetting what he wanted after turning body round and could not remember old friends' names), dysphasia, bad temper, insomnia, fatigue, petechia tongue, thin and greasy coating, thin and rough pulse. It was due to stasis obstructing head and deficiency of *qi* and blood. He was prescribed *jian nao san*. After taking drugs for one week, the vertigo and headache were relieved, the sleep was good, the spirit was better and he felt quite good. After taking drugs for two months, the condition of disease was steady, and he was able to write letters and speak with good arrangement of ideas. He continued to take drugs for regulating liver and kidney and nourishing heart *qi*.

7) Pulmonary tuberculosis: *Wuhu* first people's hospital uses the followed formula to treat epituberculosis, chronic fibril cavity tuberculosis and hemoptysis due to tuberculosis with good effect. The drugs have been produced by *Wuhu* herbs factory. The formula is *di bie chong* 120g, *zhi shou wu* 450, *bai ji* 450g. They are mixed, grinded into powder and then made into pills with honey, 9g every time and three times a day. They are taking with water. The organization of the formula is accurate and suitable. *Di bie chong* can activate blood, dispersing stasis; *bai ji* supplements lung, reduces heat, astringes lung, stops bleeding, disperses stasis, promote blood generation, eliminates swelling and promote muscle generation; *shou wu* nourishes liver and kidney, and its function is better than *di huang* and *tian men dong* ("ben cao gang mu"). The author use this formula and adds *bai du* 180g, *zi he che* 120g. They are grinded into powder and then made into pills with the decoction of *sheng di yu* 180g, *lv cao* 180g, *huang jing* 180g as large as mung bean. It is named *bao fei wan*, 9g every time and twice a day. The effect is better.

[case] patient *Leng*, female, 34, worker. She suffered pulmonary tuberculosis for five years, and treated by antitubercular drug without being cured

thoroughly. There was a cavity with 2*4cm in right and upper lung, accompanied with floccule shade. The manifestations were night sweating, tidal fever, thin body, fatigue, ESR41mm/h, slight red tongue with thin coating, petechia in the edge of tongue, and thin, wiry and rapid pulse. It was due to deficiency of *qi* and *yin* both of lung and spleen, and obstruction of stasis and heat. *Bao fei wan* was prescribed for one course. Reexamination showed absorption of focus and closure of cavity. She was asked to take drugs continuously to enhance the therapeutic effect.

8) External hemorrhoids: live *di bie chong* without head is used to wipe external hemorrhoid once everyday. After 3 to 4 times, the hemorrhoid would disappear. It is also due to the functions of eliminating swelling and dispersing stasis.

9) Sciatica: the folk squeezes 20 to 30 live *di bie chong* which have been washed by cool boiled water for juice. The juice is taken to treat sciatica with obvious effect. After taking drugs, the pain would be relieved the next day. It is also due to the functions of activating blood, dredging collaterals, treating injuries and relieving pain. The effect of juice is better.

10) Low back pain: three *di bie chong* are baked until they are crisp, grinded into powder and then taken with water (with Shangxing wine is better) once in the evening. It is effective to low back pain due to trauma and kidney deficiency. Pregnant women are not allowed to take. Additionally, 7 or 8 big *di bie chong* (or 14 or 15 small *di bie chong*) are washed by warm boiled water, pounded and squeezed for juice. The juice is taken with wine once or twice a day. It is quite effective to acute low back sprain.

11) Nasopharyngeal carcinoma: *di bie chong*, *zha jiang cao* and brown sugar are pounded together and used to cover focus. *Zha jiang cao* is removed away for second application. The doses of drugs depend on the condition of disease. Continuous administration can relieve the condition.

12) Melanoma: the formula is *di bie chong* 1000g, *jin yin hua* 1000g, *hong zao* 500g, *he tao ren* 500g, *zhi ma qian zi* 250g, *bing pian* 18g, *zhu dan zhi* 750. Except *zhu dan zhi*, drugs are grinded into powder. *Zhu dan zhi* is steamed for one hour, mixed with powder, and then made into pills with honey. Every pill weights 7.5g. One pill was taken both in the morning and evening^②.

① *dong fang qian long shi*: the whole body of *Cybister tripunctatus orientalis* Gschwendtn. It lives in water, and can flies into sky in the evening. It is produced in *Guangxi*, *Guangdong*, *Zhejiang*, *Fujian* and other provinces. Insect part of “*gang mu shi yi*” records it. It is sweet in flavor, mild in nature, and can supplement kidney and liver. It once is used to treat face wry, frequent urine in the night of old people, and children enuresis. Because its function supplementing, people of Guangdong province likes to eat deepfried *long shi*, showing the mild nature at the same time.

② “national herbs compile” first part, page 48, people’s health public house.

6 *Shui zhi* (Leech) (subsidiary drugs: *meng chong*)

Shui zhi is dried whole body of *Whitman's pigra*. Tawny leech, and *Hirudo nipponia* whose popular name is *ma huang* also can be used as drugs. It is produced in every province. It is salty and bitter in flavor, mild in nature, toxic and attributive to liver and gallbladder meridians.

Its functions are (1) dispersing stasis, (2) breaking blood stagnation and mass. It can be used to treat amenorrhea due to blood stasis, mass, etc.. Doctor *Zhang zhongjing* used *shui zhi* in *di dang tang*, *da huang zhe chong wan* and *bai lao wan*. Doctor *Zhang Chunxi* also was expert in applying this drug, and he considered that *shui zhi* can break stasis but not injuries new blood, and only goes into blood phase not injuries *qi* phase. However, we have different opinion. 0.9g powder of *shui zhi* once was used to treat liver and spleen swelling due to schistosomiasis one time a day.

Some weak patients have wan and sallow complexion, and felt extreme tired after taking drug for 2 or 3 days. The laboratory showed erythrocyte, hemoglobin and thrombocyte decreased. These are symptoms of *qi* and blood injury. Weak patient of other related diseases usually have wan and sallow complexion quickly and fatigue feeling after taking the drug. Reason why Ancient doctors consider it is toxic may roots in this. Therefore, although there is stasis and mass, it should be careful when *shui zhi* is used to treat the patient with deficient syndrome and weak pulse.

Shui zhi mainly contains protein, and its fresh saliva contains hirudin. Hirudin can stop thrombin activating fibrinogen so as to block blood coagulation. 20mg of hirudin can block 100g of human blood coagulation. Histamine-like substance secreted by *shui zhi* can expand capillary vessel, relieve arterioles spasm, and reduce blood viscosity. Perhaps the function of activating blood and dispersing stasis is relative to these pharmacodynamic mechanisms.

When *shui zhi* is used to dredge meridians, activate blood and disperse stasis for petechia in skin, doctor *Shen Zhuanglei* finds that it also can promote urine and eliminate edema obviously and therefore considers *shui zhi* as drugs for severe edema of nephrotic syndrome. He said, however, it needs further study whether the function of promoting urine is relative to improving microcirculation and increasing the renal blood flow^④. This is a new application of dispersing stasis to promote water too. *Shui zhi* can be used for all the edema caused by heart, liver and kidney if patient's constitution is strong or there are stasis symptoms for further practical observation.

Additionally, some contemporary doctors try to treat cancer by *shui zhi* and receive some therapeutic effects through essential observation.

Shui zhi is quite fishy, so decoction usually makes patient vomit. It can be baked in mild heat separated by paper (it can not be deepfried in oil, otherwise the actions would be reduced.), grinded into powder, and then filled into capsules. Lack of blood stasis and pregnant women are not allowed to take. It should be assisted by drugs for supplementing *qi* and blood if it is used for deficient patient. The dose usually is 2-4g for decoction, and 0.7g to

1.3g for powder, of which half is taken in one time. The clinical applications are discussed as follows.

1) Abdominal mass: *shui zhi* can effectively treat abdominal mass which has longy duration and little effect by other drugs. For example, doctor *Zhang Chunxi's li chong wan* (seen to case in this section) is quite effective to all abdominal mass, amenorrhea due to blood stasis and mass due to lochiorrhea. *Jian xian dan* in *wei sheng bao jian* can activate both *qi* and blood, have both dredging and astringent actions, and also can treat uterus mass. Doctor *Wu Jutong* says that his *hua zheng hui sheng dan* can break all mass and hardness, ... longy duration of mass can not be cured without *hua zheng hui sheng dan*. The formula can not only tonify, but also reduce, have no side effect and also can be used for weak patient. The abdominal mass mentioned here mainly include, hysteromyoma, ovarian cyst, etc..

[case] patient *Zhang*, female, 42. She suffered growing mass in left low abdomen in the recent two years. The manifestations were much menstruation, abdominal pain, thin and white tongue coating, red tongue with petechia in the edge, wiry pulse, and deep and rough pulse in *chi* location. Summarizing her information, it belonged to *zheng bing* (tumor disease) in "*jin kui yao lve*". Doctor *Zhang Chunxi's li chong wan* was prescribed to disperse stasis and eliminate mass. The formula was *shui zhi* (not baked) 30g, *sheng huang qi* 45g, *sheng san leng* 15g, *sheng e zhu* 15g, *dang gui* 18g, *zhi mu* 18g, *sheng tao ren* (with skin and tine) 18g. They were grinded into powder and then made into pills with honey as large as phoenix tree seed, 6g every time both in the morning and evening. The drugs stopped being taken during menstruation. After taking drugs for three courses, the mass became smaller gradually and eventually disappeared.

Doctor *Liu Tianfeng*^② uses *sheng shui zhi* powder (3g powder is taken with Shangxing wine both in the morning and evening.) to treat 11 cases of mass of oviduct or ovary, of which 6 cases are cure, 3 cases are improved and 3 cases fail. The time of taking drug depends on the size of mass, usually from 2 months to 6 months.

2) Rheumatic heart disease: this disease is similar to heart *Bi*, usually is caused by invading of wind, cold and dampness into meridians and blood vessels, resulting in heart body injuries, *qi* and blood deficiency, unsmooth blood circulation, blood stasis, and sleep and kidney deficiency if longy duration. The manifestations are palpitation, short breath, cyanosis, feet dropsy, petechia in tongue, and thin and irregular pulse. If the symptoms of stasis are obvious and healthy *qi* is not very deficiency, the treatment methods should put emphasis on activating blood and dispersing stasis, assisted by warming *yang*, promoting water, supplementing *qi* and calming heart. *Xin bi tang* can be prescribed. The formula is *sheng huang qi* 15g, *lu dang shen* 15g, *chao bai zhu* 15g, *fu ling* 15g, *dang gui wei* 9g, *dan shen* 9g, *tao ren* 9g, *hong hua* 9g, *shui zhi* powder 1.2g (taken with decoction), *meng chong* 1.5g, *zhi gan cao* 4.5g, decoction, one dose a day. If the patient is weak and quite

deficiency, warming *yang* and supplementing *qi* should be applied first, and then insect drugs for activating blood and dispersing stasis can be selected. For supplementing healthy *qi*, modified *zhi gan cao tang* can be used: *hong shen* powder 1.5g (taken with decoction), *shu di huang* 24g, *zhi huang qi* 12g, *rou gui* powder 2g (taken with decoction), *e jiao* 9g, *mai dong* 9g, *zhi gan cao* 9g, *wu wei zi* 3g, *chao zao ren* 15g, *hong zao* 10, *sheng jiang* 3 pieces.

[case] patient *Shi*, male, 34, worker. He suffered rheumatic fever three years before and was cured. The disease reoccurred for several times because of coldness and over-work resulting in mitral stenosis, and he was diagnosed as rheumatic heart disease. The manifestations were palpitation after few work, short breath, cyanosis, choking cough, lusterless complexion, feet dropsy which was severer in the evening, pale tongue with thin and white coating, petechia in the edge of tongue, weak, thin and rough pulse, and slow-irregular-intermittent pulse sometime. It was deficiency caused by longy duration, resulting in heart *qi* deficiency, failure of lung *qi* to ascend, blood stasis and unsmooth vessel *qi* circulation. Heart *Bi* could not be cured quickly, so supplementing *qi* and *ying*, activating blood and dispersing stasis should be applied to regulate heart *qi* and smooth vessels. He was prescribed five doses of *xin bi tang*. After taking drugs, he felt chest comfortable, and palpitation and short breath were relieve quite a lot. He was asked to continue to take the former formula, the disease was improved gradually and steadily, and petechia in the edge of tongue disappeared day by day. Later, he was regulated by concentrated decoction to enhance the therapeutic effect.

3) Coronary heart disease: some diseases in TCM, such as *zhen xin tong*, *jue xin tong*, *xiong bi*, etc., include coronary heart diseases. It usually results from *qi* stagnation and blood stasis. Therefore, activating blood and dispersing stasis are one of the most important methods. However, it only aims at excess and treats branch. The root is *qi* and *yin* deficiency of heart, liver and kidney. Branch is treated in acute case, root is treated in chronic disease, or branch and root are treated at the same time. Drugs are selected according to syndrome, can not be illiberal ignoring other aspects. If the symptoms belong to *qi* stagnation, blood stasis, meridians spasm and unsmooth blood circulation resulting in angina pectoris or even myocardial infarction, and there are obvious petechias in tongue and lip, 1g of *shui zhi*, which can activate blood, disperse stasis and break coagulation, can be added into the formula which can activate blood, disperse blood, regulate *qi* and dredge *yang*. The therapeutic effect usually is quite good.

[case] patient *Yang*, male, 45, cadre. He suffered chest oppression, or even prickly pain, sweating, palpitation and short breath after few activities in the recent two years. Blood fat was high, and ECG showed degressive ST segment, biventricular hypertrophy, heart block. He was diagnosed as coronary heart disease. He received lipidemic-modulating drugs and vascular-expanding drugs, and prickly pain could be relieved by glonoin. The tongue coating was slight greasy, there were petechias in the edge of tongue, lip was

dark, and pulse was thin and irregular sometimes. It was *zhen xin tong* due to stasis of heart and vessel, obstruction of meridians, failure of heart *yang* to stretch and stagnation leading to pain. The treatment methods were activating blood, dispersing stasis, regulating *qi*, dredging *yang*. The formula was *tai zi shen 15g, zi dan shen 15g, zhi huang jing 15g, shui zhi 1g* (grinded into powder and taken by two times), *quan gua lou 12, xie bai tou 12g, guang yu jin 9g, tan xiang 4.5g, chuan xiong 4.5g, sheng shan zha 30g, zhi gan cao 4.5g*, decoction, one dose a day. After taking 15 doses of drugs continuously, the condition is good, and petechia in the tongue and lips disappeared gradually. He was asked to take pill to enhance the therapeutic effect. *Tai zi shen 90g, dan shen 90g, zhi huang jing 90g, zhi shou wu 90g, sheng shan zha 90g, guang yu jin 90g, ze xie 90g, tan xiang 30g, yan hu suo 60g*. They are grinded into powder and made into pills with water as large as mung bean, 4.5g every time both in the morning and evening. ECG was normal, and follow-up after one year revealed no reoccurrence.

4) Thrombocytopenia after lienectomy in portal hypertension: doctor *Qin Liangfu* uses *shui zhi tang* ③ to treat 18 cases of thrombocytopenia after lienectomy in portal hypertension with good therapeutic effect through essential observation. Because most patients have such manifestations as fever, red tongue, wiry and rapid pulse due to stasis and heat in *ying* and blood phase, *shui zhi tang* is applied to cool blood and disperse stasis. The thrombocyte amount usually is reduced obviously after taking 2 to 4 doses of drugs. The formula is *shui zhi 6g, meng chong 9g, di bie chong 9g, tao ren 9g, dan pi 9g, sheng di 15g, sheng pu huang 15g, sheng wu ling zhi 15g*, decoction.

[case] patient *Liu*, male, 41, No.19214. The thrombocyte amount was 1,225,000/mm³ eight days after lienectomy, and was reduced to 360,000/mm³ after taking three doses of *shui zhi tang*. It increased to 515,000/mm³ when the drugs stopped for two days. The thrombocyte amount was reduced to 320,000/mm³ after taking another 2 doses.

Comment: the action of dispersing stasis is powerful. The drugs should stop being taken when therapeutic effect arise and can not be overused.

5) Carcinoma of esophagus: doctor *Song Huazhu* uses *zao zhi san* ④, which can soften hardness, eliminate phlegm and dredge stagnation, to treat 3 cases of carcinoma of esophagus with obvious therapeutic effect. 30g *hai zao* and 6g of *shui zhi* are grinded into powder, 6g every time, twice a day. They are taken with Shangxing wine. The patients feel throat comfortable after taking drugs for 5 days, and have no difficulty in swallowing food. The disease is cured gradually after taking drugs for 1 to 2 months. Another formula is 30g of *hai zao* and 15g of *shui zhi*. They are grinded into powder and filled into 10 parcels, 1 to 2 parcels a day for treating carcinoma metastasis of rectum. Doctor *Zhang Chengzhou* uses modified *shui zhi tang* ⑤ to treat carcinoma of esophagus and gastric cancer with good short-term therapeutic effect. The formula can improve the symptoms, but it is difficult to dissolve mass. The

formula is *sheng shui zhi 15g, sheng ji nei jing 12g, zhu ru 12g, qing ban xia 12g, ren dong teng 30g*, decoction, one dose a day.

There are squamous cell carcinoma and adenocarcinoma in pathology, and there are deficiency and excess in syndrome differentiation. It usually is excessive syndrome in the early and middle stage, such as *qi* stagnation, phlegm assembly, blood stasis and toxin obstruction. While it usually is deficiency of *qi* and *yin* and mixture of deficiency and excess in the later stage due to longy duration and dysphagia. The treatment methods depend on syndrome. *Zao zhi san* is suitable for stagnation of phlegm and stasis, manifesting as greasy tongue coating, purple tongue with petechia in the edge, thin and slippery pulse, or thin and rough pulse. It should be careful if it is used to treat such patient who is complicated with ulceration, vomiting sticky saliva with blood. Or *sen san qi* powder should be added. It is not suitable for other syndromes, such as liver oppression and *qi* stagnation, heat toxin injuring *yin* and deficiency of *qi* and *yin*. The author once used this formula to treat a case of terminal squamous cell carcinoma of esophagus complicated with ulceration with a little therapeutic effect by incipient treatment. But later, the formula stopped being taken in order to avoid perforation when the patient spitted blood frequently because the ulceration reached muscle layer. Therefore, it is a basic principle, which must be followed, that syndrome differentiation and disease differentiation should be combined and the treatments should depend on syndrome.

6) Induce labor: “*bie lu*” says *shui zhi* can induce abortion. Therefore, with much drugs for breaking blood and dispersing stasis, *shui zhi* can used as a main drug to induce labor^⑥. The formula is *shui zhi 9g, di bie chong 9g, hong hua 9g, tao ren 9g, san leng 9g, e zhu 9g, ji xing zi 9g, leng xiao hua 9g, meng chong 4.5g, da huang 4.5g, gui zhi 2.5g*, decoction, one dose a day.

Comment: the formula’s actions of breaking blood, attacking stasis and inducing labor are very powerful, so it is suitable for strong constitution but not for weak patient. The decoction should be taken in daytime, and the patient should do as much exercise as possible. The drugs stop being taken if menstruation-like substance is discharged and embryo is induced which is confirmed by tests. The patient has to take drug continuously if the menstruation-like substance is little. This formula should be applied under strict observation of obstetric doctor. Patient can not take drugs by herself randomly in order to avoid massive heamorrhage.

7) Stasis due to falls and beat: Blood stasis, heart and abdominal pain, constipation and anuresis due to falls, beat and trauma can be treated by *duo ming san* (“*ji sheng fang*”: *shui zhi 1.2g, sheng da huang 6g, qian niu zi 6g*, decoction) to disperse stasis, resolve stagnation, promote stool and urine.

8) Cervical scrofula and mumps: herbal research group of Wuxi liberation community uses *shui zhi san* ⑦ to treat 80 cases of cervical scrofula (64 non-fester cases, 16 fester cases, and 84% of cure rate) and 40 cases of mumps (all were cured within 1 to 3 days.). It is worth applying because of easy

method and good therapeutic effect. The formula is same dose of *shui zhi* and *bing pian*. The methods are that (1) *shui zhi* is baked on the tile, grinded into powder with same dose of *bing pian*, mixed with Vaseline, and then is used to cover focus; (2) *shui zhi* is baked on the tile, grinded into powder with a little *bing pian*, and then is used to cover focus of scrofula; (3) 4.5g of *shui zhi* powder which is baked on the tile is taken twice a day for scrofula. These therapeutic effect are due to the functions of breaking stasis and eliminating stagnation. The dose should be reduced for weak patient, or drugs for supplementing healthy *qi* and softening hardness should be added.

9) Reunion tendon: powder of *shui zhi* and *song xiang* is used to cover the focus.

10) Appendix mass: Jingzhou medical college uses *shui zhi* powder (taken after being mixed with water) to treat appendix mass with quite good therapeutic effect.

Subsidiary drugs: *meng chong* (gadfly)

Meng chong is dried whole body of *Tabanus bivittatus* Mats.. The popular name is *niu meng*. It is produced in the every province. It is slight cold in nature, bitter in flavor, and attributive to liver meridian. The functions are dispersing stasis and eliminating mass, so it is effective to abdominal mass, amenorrhea due to stasis and blood stasis due to trauma. “*ben cao cong xin*” says that is can break blood, dredge meridians and reduce abortion quickly. The action of breaking blood and dispersing stasis of *meng chong* is more powerful than that of *shui zhi*. Fierce diarrhea may arise after taking drugs, and would stop when drugs are not taken. These two drugs usually are used together to enhance the functions of breaking blood and dispersing stasis. Lack of stasis and pregnant women are contraindications. The clinical applications are discussed as follows.

1) Cervical cancer®: TCM considers that it is usually due to injury of *chong* and *ren* meridians, dysfunctions of liver, spleen and kidney, toxin formation from heat and dampness, *qi* stagnation and blood stasis. The treatment principles are both supplementing and reducing and combination of syndrome differentiation and disease differentiation, not only emphasizing on local changes of cancer, but also enhance the capacity for resisting disease. The main treatment methods are breaking hardness, dispersing stasis, eliminating turbidity, resolving toxin, clearing heat, eliminating dampness, regulating *chong* and *ren* meridians. (1) formula for early stage of cervical cancer: *meng chong* 6g, *zhi ru xiang* 6g, *zhi mo yao* 6g, *shui zhi* 9g, *feng fang* 9g, *huang bai* 9g, *dan pi* 12g, *long dan cao* 12g. They are grinded into powder. 30 doses of powder are mixed together and then made into pills with decoction of *jin yin hua* 20g, *shu yang quan* 120g, *long kui* 120g, *ban zhi lian* 120g. 9g of *xiong huang* is used for shell of pills. 1.5g of pills is taken twice a day. (2) formula for terminal cervical cancer: *yu huang dan* for oral administration contains *meng chong* 6g, *shui zhi* 6g, *ren zhi jia* 6g, *huang lian* 6g, *ru xiang* 6g, *mo yao* 6g, *hai long* 1 strip, *bai hua she* 3 strips, *quan xie* 9g, *feng fang* 9g, *huang bai* 9g,

dan pi 12g, *long dan cao* 15g. They are grinded into powder and then made into pills with decoction of *jin yin hua*. *Xiong huang* is used as shell. 3g of pills is taken twice or three times a day. Tianjin 201 formula for external use: *she xiang* 1.2g, *she chuang zi* 4.2g, *xue jie* 7.5g, *mo yao* 9g, *ru xiang* 10.5g, *bing pian* 10.5g, *peng sha* 10.5g, *cong sha* 10.5g, *er cha* 11g, *xiong huang* 13.2g, *zhong ru shi* 13.2g, *zhang dan* 46g, *bai fan* 585g. They are grinded into powder and used to cover the focus of cervical cancer twice a week.

2) Trauma: 3g of *meng chong* and 6g of *dan pi* are grinded into powder and taken with Shangxing wine.

Comment: although *di bie chong*, *meng chong* and *shui zhi* belong to drugs for activating blood and dispersing stasis, there are differences in clinical applications. *Bi bie chong* can be used for deficiency syndrome, *shui zhi* can be used only for excess syndrome, and *meng chong* should be used more carefully because its action of breaking stasis is the most powerful.

① five cases report of nephrotic syndrome treated by kidney-tonifying method and hormone, *New Medicine and Pharmacology Journal* 8:33, 1974.

② three cases of gynaecologic diseases, *New TCM*, 5:27, 1975.

③ therapeutic effect observation on *shui zhi tang* treating thrombocytopenia after lienectomy in portal hypertension, *Shanghai TCM Journal*, 5:15, 1963

④ treating *ye ge* by empirical formula of *hai zao* and *shui zhi*, *TCM Journal*, 1:15, 1966.

⑤ short-term therapeutic effect observation on modified *shui zhi tang* treating esophagus and gastric cancer, *Weifang Medicine* 2:35, 1978

⑥ TCM empirical formula compile page 274, health section of 7341 army rear service, 1975

⑦ *shui zhi san* treating cervical scrofula, *Wuxi Medicine*, 5, 1975

⑧ tumor group of Shuguang hospital: 122 case of terminal cancer survive for more than three years treated by combination of TCM and western medicine. *Clinical Date Compile of Achievements Exhibition of Combination of TCM and Western medicine*, page 134, 6, 1974, Shanghai.

7 feng fang (hornet nest) (subsidiary drugs: feng du)

Feng fang is nest of *Polistes mandarinus* Saussure or congener insects, and produced in every province. It is mild in nature, bitter, salty and slight sweet in flavor, and attributive to liver, kidney and stomach meridians. The nest with eggs is better. Ancient herbs books say it is toxic, but toxic side effects have not been found when patient takes large dose of *feng fang* through clinical observation.

It is reported by Japanese pharmacologists that *feng fang* can tonify heart, promote urine, stop bleeding, expel parasite, etc.. It contains beeswax, resin, benzene, calcification, iron, etc.. Alcohol, aether and acetone lixivium of *feng fang* can promote the coagulation of blood, acetone lixivium in particular, and also strengthen the heart beat, promote urine and induce blood pressure temporarily.

Feng fang can expel wind, stop spasm, resolve toxin, treat carbuncle,

eliminate swelling, relieve pain, and treat impotence and obstruction judging from the records of ancient herbal books and practical experience. It is suitable for not only oral administration but also external use, however, it is a pity that emphasis is put on external use in nowadays. In fact, *feng fang* is not only an important drug for surgery diseases, but also effective to some internal diseases. There are four main functions.

1) Treating arthralgia: it can dredge obstruction and expel wind, and is quite effective to longy duration of joint pain and swelling. Therefore, “*bie lu*” says it can treat *li jie zhong chu* (rheumatoid arthritis). According to the author’s experience, longy duration of rigid joint or even joint deformation due to rheumatoid arthritis or rheumatoid disease can be treated by *feng fang*.

2) Treating cancer: besides *ai ji* in “*wei ji bao shu*”, *ai chuang* in “*zhi zhi fang*”, and *ai fa* in “*wai ke qi xuan*” directly call it *ai*, there are other names for cancer in TCM, such as *e chuang* (malignant ulcer), *fu gu ju* (such as osteosarcoma), *shi ju* (mass as hard as stone), *liu zhu*, *e he*, *fan hua* (the form of mass looks like rape flower), *hei ding* (dark furuncle), *zheng jia* (mass), *ji ju* (mass), *ye ge* (such as esophagus cancer), *beng lou* (such as cervical cancer), *zhuo dai* (turbid leukorrhea), etc..

“*bie lu*” says that *feng fang* can treat *e ju* and *fu gu ju*, and resolve all kinds of toxin. Doctor *Zhang Wenzhong* uses *feng fang* and warm wine to treat uterus bleeding with five kinds of color (this symptom is similar to cancer of uterus.) with good therapeutic effect. *Ru ai san* (breast cancer powder) of “*yan fang xin bian*” considers *feng fang* as main drug. Therefore, doctor *Fan Tiantu* once pointed out that *feng fang*, *quan xie*, *wu gong*, *shou gong* and so on are effective to some cancers. Shanghai *Shuguang* hospital uses *feng fang*, *quan xie*, etc., to treat breast cancer and lymph node enlargement due to tumor metastasis△. There are increasing reports on *feng fang* treating cancer in the recent years. Therefore, *feng fang* is the drug that is worth studying on aspect of treating cancers.

3) Treating impotence and enuresis: it can tonify *yang* and supplement kidney, and can be trusted to treat impotence and enuresis.

4) Treating carbuncle, furuncle and lymph node enlargement: it is powerful to resolve toxin, kill parasite, eliminate carbuncle and treat furuncle. *Feng fang* is often used by surgery, such as *feng fang gao* of “*zheng zhi zhun sheng*” treating lymph node enlargement, *xiao zhong hua du gao* treating carbuncle, furuncle and swelling toxin, *san sheng san*▼ treating malignant ulcer, etc.. *Haimen* TCM hospital uses powder of the same dose of *feng fang* with eggs and *shan yang jiao* for back carbuncle and other carbuncles with very good therapeutic effect. There are many similar examples. We are not going to list them one by one.

As for compatibility of drugs, it can treat toothache with *xi xin*, furuncle and cancer with *ban zhi lian*, urticaria and other skin itching syndrome with *chan yi*, impotence with *hua zhi zhu*, enuresis with *sang piao*, *Bi* syndrome with *di bie chong*, *quan xie*, *jiang can*, obstinate low back pain with *wu shao she* and

di bie chong, breast cancer with *ku lian zi* and *liang tou jian*, etc..

The dose is 6g-12g for decoction, 1g-2g for powder, twice a day. The dose can increase for the severe case with severe *yang* deficiency. Through large dose of *feng fang* was taken in order to enhance the therapeutic effect, no side effect or toxin reactions have been found in clinic. The dose for external use depends on condition. It should be thought carefully if it is used to treat *yang* carbuncle with suppurative tendency. The clinical applications are:

1) Cancer: *feng fang* is a promising drug for treating cancer, and has draw attention from many fields. There are many formulas whose main drug is *feng fang*. Here we are going to introduce some useful formulas.

(1) *xiao liu wan*: one tumor hospital declares that *xiao liu wan*, which contains *feng fang*, *quan xie*, *jiang can*, ect., can control cancer in some degree, throat cancer, nasopharyngeal cancer, metastasis lymph cancer in particular. The author also often uses it, and considers there are some therapeutic effects.

[case] patient *Zhang*, female, 61, housewife. She suffered paroxysmal epigastric pain, accompanied with acid regurgitation and belch. Paroxysmal pain could be relieved by *wei shu ping* and food. In these years, pain reoccurred frequently, aggravated in the evening. She vomited half cuspidor of food of last meal 3 to 4 hours after meal. She eat little food, became thin and got constipation. The disease became so severe day by day that she only could eat little liquid food. Paroxysmal angina could be relieved only by *an nong tong* injection. She was hospitalized in affiliated hospital of Nantong medical college in June, 1963, and was diagnosed as malignant change of ulcer with pylorus obstruction, and refused to receive surgery. She only received glucose injection for maintaining physical power and dolantin for relieving pain. Four months later, the disease was quite severe and she asked the author for treatment. *Ge zheng* (dysphagia due to cancer) was so severe that normal drugs do not enable to have therapeutic effect, so insect drugs were selected directly to break mass, soften hardness, stop regurgitation and relieve pain, promising to relieve the condition a little, pain and vomiting. The formula was *zhi feng fang 6g*, *zhi quan xie 6g*, *zhi qiang long chong 6g*, *dai zhe shi 6g*, *chen pi 3*, *gan cao 2g*, They were grinded into powder and filled into 10 parcels, one parcel every time and twice a day. After taking first parcel, the pain was relieved a little, vomiting decreased and she felt comfortable. After taking drugs for several days, the disease was promoted a lot, and she could eat gruel. Ten days later, she could eat porridge and noodle, walk, and the spirit was also promoted. In the later years, the condition was good, and occasional pain can be relieved by former formula.

Judging from this case, insect drugs such as *feng fang* can relieve pain and control the development of this disease.

(2) Breast cancer: the followed formula comes from “*yan fang xin bian*”. According clinical observation, the hard mass can be induced after taking drugs for one month, mild case could be cured after 2 to 3 months, and

severe case needed long time. The formula is *zhi feng fang*, *ku lian zi*, *xiong shu fen*. They are baked and grinded into powder with the same dose, or were made into pills with water. 9g of drugs is taken with water or rice wine every time, once every two days. Haimen TCM hospital of Jiangsu province made the formula and *shan yang jiao* (doubled dose than other drugs) into *ru ai wan* (breast cancer pills), 9g every time, twice a day. It is declared that the therapeutic effect is better.

(3) *Fei ai fang* (lung cancer formula): TCM considers that lung cancer results from internal injury of healthy *qi* and invading of pathogenic toxin, which resulting in lung *qi* stagnation, failure of lung to ascend and descend, blood stasis, *qi* stagnation and meridian obstruction. Therefore, supplementing *qi*, nourishing *yin*, clearing heat, eliminating phlegm, resolving toxin, dredging stagnation, activating blood and eliminating swelling are applied. Under the guide of combination of syndrome differentiation and disease differentiation, Shanghai tumor hospital uses the followed formula to treat lung cancer. The formula is *zhi feng fang* 12g, *bei sha shen* 12g, *ban zhi lian* 60g, *ou jie* 9g, *xing ren* 9g, *pu huang* 9g, *huang qi* 9g, *pi pa ye* 9g, *shi yan*① 30g, *lou lu* 15g, decoction, one dose every day. It can relieve the symptoms.

2) Flowing wind-phlegm (similar to multiple abscess), mass and hemia: *tai bao dan*②, a adhesive plaster formula: *feng fang tan* 120g, *gong ding xiang* 60g, *xi xin* 60g, *bi bo* 60g, *ba cao shuang* 60g. They are grinded into powder and sealed off. 300g of *qing liang gao*③ is melted, mixed with the powder, and then used to cover focus, once every 5 to 6 days. It is good effective to cold mass, arthralgia, hemia, flowing wind phlegm and early stage of mastitis. Redness and swelling with purulency which belong to *yang* syndrome are contraindication.

3) Carbuncle, furuncle and swelling toxin: there are many formulas in surgery whose main drug is *feng fang*. Here we select four formulas.

(1) *feng fang san*: it is a popular formula for mastitis in folk, but is little applied by doctor. It is not explored until researching-folk-prescription movement after liberation. Doctor *Yang Zhongxue*④ uses this formula to treat acute mastitis with 88.4% of cure rate, 92.3% of effect rate and 2.1 days of average cure time. The therapeutic effect is quite good. *Feng fang* is refined, cut into pieces, baked into toast tan color (burned black is avoided) in pot, grinded into powder and then sealed off. 2 to 3g of powder is taken with 50g of hot Shaoxing wine every four hours. Drugs can continue to be taken if the condition is promoted but not cured after 3 days. But surgery should be considered if the condition is not improved a lot but purulency tendency comes up. During the treatment, the patient should drink much water, avoid wind and rest much. Stupe can be applied for severe case. Purulency tendency is contraindication.

(2) *xiao zhong hua du gao* (adhesive plaster for eliminating swelling and resolving toxin): it is good at treating back carbuncle, carbuncle, furuncle and all kinds of swelling no matter whether fester or not. The formula is *lu feng*

feng fang 30g, *xing ren* 30g, *huang qi* 22.5g, *she tui* 15g (washed by salty water), *yuan shen* 15g, a agglomerate of hair (without greasy stain) as large as chicken egg, rape oil 300g, *huang dan* 150g. Rape oil and hair are decocted until hair melted, and then *xing ren* is added. When *xing ren* becomes black, liquid is filtered and *huang qi* and *yuan shen* are added. They are decocted for 1 to 2 hours, then *feng fang* and *she tui* are added. When liquid becomes purple black, the liquid is filtered again. The refined liquid is boiled by mild fire. Finally, *huang dan* is added and the liquid is stirred quickly until that the drug drops would not scatter when they drop. The drug is put on kraft or oilpaper and then used to cover focus. Carbuncle without purulency would scatter, one with purulency would break, and broken one would close up. The mild case would be cured by several doses, and drugs should be changed continuously for severe case.

Comment: this formula comes from “*shou shi xin bian*” wrote by *Wang Qianzai*, a famous doctor of *Qing* dynasty. The formulas recorded in the book are all his empirical formulas and worth cherishing. The action of this formula is good, quick and steady, and also can be used to treat shank ulcer and frostbite. Longy duration of burn, scald and hemorrhage due to knife and falls can be cure by this formula gradually. The author once used it receiving satisfied therapeutic effect. The drugs of this formula are the same to that of *feng fang gao* of “*liu ke zhun sheng*”, only the dose is different. *Song Zaoyou*, a doctor of Pangbu third people’s hospital, uses it to treat 3 cases of skin tuberculosis. They are all cured.

(3) *Feng zhi san*: powder of *feng fang* and *bai zhi* with same dose are mixed with lees and then used to cover focus, treating neck carbuncle and back carbuncle effectively. The drugs are changed once a day. The carbuncle without breaking would be cured after several times.

(4) *Feng fang xi ji* (*feng fang* lotion): 30g of *feng fang* and 1000ml of water are boiled for 15 minutes. The lotion is made after the decoction is filtered. It is effective to suppurative wounds, such as infection after trauma, wound infection after surgery, furuncle, carbuncle, scald, cellulites, infantile subcutaneous necrosis, etc.: The wound is soaped and washed by *feng fang* lotion, and is covered by sterilized gauze when it is clean. Warm lotion is applied for the wound with necrotic tissue, once or twice a day. The lotion can remove rotten tissue, promote granulation, diminish inflammation, and relieve pain, promote the condescence.

4) Enuresis: enuresis is an ailment, but there are many causes, and some cases are not easy to be cured thoroughly. “*xin xiu ben cao*” says *feng fang* can treat enuresis and urinary incontinence, but “*zi mu mi lu*” says it can treat constipation and anuresis. Judging from this, *feng fang* treats enuresis by warming *yang* and supplementing kidney to strengthen root. *feng fang* can be selected for longy duration, obstinate enuresis with weak body. Baked *feng fang* is grinded into powder, 3g to 6g every time for adult and reduced dose for child, twice a day. It is taken with Shaoxing wine or water. Decoction can

be added for other symptoms.

[case] patient *Chen*, male, 25, worker. He suffered enuresis when he was young, and had not been cured until now. He got enuresis every 3 to 5 days, and aggravated by hard work. He received treatments for many years, but without therapeutic effect. The manifestations were lusterless complexion, aversion to cold, waist pain, deep and weak pulse in left *chi* location. It was due to kidney *yang* deficiency. He was prescribed 60g of *feng fang san*, 6g every time, twice a day. The patient mistook the administration as 30g every time. So he finished the drugs in two day. The disease was cured after taking drugs without any side effects. However, it is not worth following because it is overdose. It is proper that the small dose of drug is taken continuously or increased gradually.

5) Sphacelus: it just is thromboangitis obliterans, manifesting as black color and sunken fingers and toes, unbearable pain and bone dropping one by one. Powder of baked *feng fang* mixed with vinegar can be used to cover focus, once a day. *Qu shi bao tuo tang* (*yi ren 90g, fu ling 60g, gui xin 3g, bai zhu 30g, che qian zi 15g*, one dose a day, taken for ten days) of “*shi shi mi lu*” is taken at the same time.

Angitis group of Hongkou central hospital^⑤ considers that there are stagnation and obstruction of cold, heat and dampness, and also contradiction changes of healthy *qi* and pathogenic factors. Therefore, there are three stages in clinic. (1) Acute development stage: the pathogenic factors are abundant and healthy *qi* is injured, so the development of congestion and inflammatory is quick. The treatments put emphasis on expelling factors. Warming method (*feng fang 9g, bai fu zi 9g, zhi nan xing 9g, niao bu su 3g, kang zhu 15g*, etc..) is applied for cold factor. Clearing method (*mao dong qing 60g, yi mu cao 60g, pu gong ying 30g, re dong teng 30g, gan cao 30g*) is applied for heat factor. Eliminating method (*yi mu cao 60g, tu fu ling 30g, yi ren 30g, kang zhu 15g, fang ji 15g, bei xie 15g*) is applied for dampness factor. Drugs power is concentrated to diminish inflammation. (2) Delayed active stage: the healthy *qi* become a match for pathogenic factors, so the congestion is continuous. The supplementing method (*huang qi, dang shen, mian gen, yuan shen, shi hu*, etc..) and reducing method (*ji xue teng, dan shen, hong hua, ru xiang, mo yao, san qi, da huang zhe chong wan, xiao jin pian*, etc..) are use at the same time. Chief and secondary methods can be used at the same depending on syndromes. (3) Steady recovering stage: healthy *qi* recovers and pathogenic factors are defeated, so the congestion is relieved. Methods for supplementing healthy *qi*, activating blood, expanding vessels are applied to disperse stasis, and promote generation and compensation functions of collateral circulation. The total effect rate is 95.5%, excellence effect rate is 50%, and amputation rate is 1%. It is worth referring.

6) Water-like leucorrhea: leucorrhea is usually due to liver stagnation, spleen deficiency, downward flow of dampness heat, kidney *yang* deficiency, or invading of damp toxin. Drugs selected according to syndrome differentiation

usually have therapeutic effect. However, water-like leucorrhea is obstinate. If *feng fang* is added into regular drugs, the therapeutic effect is obvious. Perhaps it is because *feng fang* has special functions of warming *yang*, supplementing kidney, resolving toxin and eliminating swelling.

[case] patient *Chen*, female, 30, worker. She did not have baby seven years after marriage, and diagnosed as congenital uterus hypogenesis. She had amenorrhea, and has menstruation after being treated by artificial menstrual cycle therapy. But when the drugs stopped being taken, she had amenorrhea again. Now, she had amenorrhea for more than one year. After periodic breast distention which disappeared after two weeks, the massive amount of water-like leucorrhea was discharged out flowing downward along thigh. She received many drugs but without any therapeutic effect. She felt vertigo, palm heat, aching pain in waist and limbs. The tongue was pale, and coating was thin and white, the pulse was wiry and thin, weak in *chi* location. It is due to blood deficiency of heart and liver, *yang* deficiency of spleen and kidney, dysfunction of *chong* and *ren* meridians, dysfunction of belt meridian. The formula was *zhi huang qi* 15g, *zhi feng fang* 12g, *lu dang shen* 12g, *xian ling pi* 12g, *shu di huang* 12g, *dang gui* 12g, *fu ling* 12g, *tu si zi* 12g, *duan long gu* 30g, *duan mu li* 30g, *gan cao* 4.5g, one dose a day, five doses. After taking two doses, the water-like leucorrhea was induced and spirit was better. The tongue coating was thin and the pulse was thin. The former formula continued to be taken. Follow-up revealed that the therapeutic effect was good and the menstruation arrived on time.

7) Bone tuberculosis, osteomyelitis and arthritis: these three kinds of diseases are quite obstinate, but can be treated by “*si wei jie du wan*” (the same dose of *zhi feng fang*, *di bie chong*, *quan xie* and *wu gong* are grinded into powder, and then made into pills with water as large as mung bean, 3g every time, twice a day), which can resolve toxin, treat ulcer, eliminate swelling, relieve pain and dredge meridians, with good therapeutic effect. Surgery department of affiliated hospital of Nanjing railway medical college uses this formula for many years and receives satisfied therapeutic effect.

Harbin TCM academic experience inherited group® points out that bone tuberculosis is caused by obstruction of toxic phlegm, so the treatment methods are opening cutaneous striae, resolving cold stagnation achieving the aim of smooth circulation of *qi* and blood and disappearance of toxin. *Feng fang san* is invented to treat bone tuberculosis effectively. The formula is *feng fang* 60g, *xue yu tan* 60g, *da shu di* 60g, *she tui* 30g, *chan yi* 30g, *jiang can* 30g. They are grinded into powder, 3g every time, twice a day. They are taken with Shaoxing wine. The formula is most suitable for bone tuberculosis without fistula. It usually results in vomiting for weak body, so reduced dose is suitable and *yang he tang* can be taken at the same time.

[case] patient *Wang*, female, 32. She suffered low back pain and fatigue in spring of 1962. She did not pay attention to them, but she lost weight, and had afternoon tidal fever, night sweating and poor appetite. She was diagnosed as

infiltration tuberculosis in community staff hospital of Heilongjiang province in June, 1962, and disease was relieved by antituberculosis drugs. Spines of the seventh and eighth dorsal vertebrae were painful by pressure, and X ray showed spines of the seventh and eighth dorsal vertebrae were broken. The antituberculosis drugs continued to be taken, but the development was not controlled. In August, 1963, patient felt increasing pain and was difficulty in walking. In August, 1964, patient could only stay in bed and low limbs were paralysed. She came to our hospital on 21th, May, 1964. The manifestations were thin body, painful complexion, diffuse swelling of the seventh and eighth dorsal vertebrae which was painful by pressure, pale tongue, thin coating, deep and thin pulse. It was *gu ju* (bone carbuncle), and warming and dredging meridians, supplementing kidney and tonifying bone should be applied. She was prescribed more than ten doses of *yang he tang*, and then *feng fang san*, 3g every time, twice a day. It was taken with Shaoxing wine. *Yu long gao* was used for external use, and changed once a week. After 3 months, the symptoms were relieved a lot, low back pain was relieved obviously and the low limbs could move. The drugs stopped being taken for one month because of sultry summer. After taking drugs for another two months, the low back pain disappeared and she could walk with stick. After another one month, she could walk without stick and do some housework such as washing clothes and carrying water. Now the drugs had stopped being taken for six months, she is the same as normal person.

8) Gum abscess: it usually is due to latent heat in *yang ming* meridian going up along the meridian and burning gum. Clearing stomach, descending fire, resolving toxin and eliminating carbuncle are applied. Kidney dominates bone, and teeth are extended parts of bone, so supplementing kidney is also used. The formula is *zhi feng fang* 9g, *yuan shen* 9g, *gu sui bu* 9g, decoction, one dose a day. The disease would be cured by 3 to 5 doses.

Additionally, small piece of *lu feng fang* is decocted by water, and the decoction can be kept in mouth for toothache. It is quite effective.

Powder of *feng fang* and a little dose of *bing pian* can be used to cover the focus of acute gangrenous stomatitis and rotten fangs. The therapeutic effect arises after using drugs for several times.

9) Preventing choriocarcinoma of uterus: lingxi people's hospital uses compound *feng fang tang*^⑦ to prevent 5 cases of choriocarcinoma of uterus with obvious therapeutic effect. The object is the patient who is diagnosed as hydatidiform mole and the urine pregnancy test is still positive after receiving uterine curettage once to three times. Compound *feng fang tang* contains *dang dui* 9g, *ze lan* 9g, *shan jia zhu* 9g, *feng fang* 6g, *fu ling* 12g, *dan shen* 15g, *shan zha* 18g, decoction, one dose a day. Five doses compose one course of treatment. After taking one course, urine pregnancy test is performed. If it is negative, it is no need to take drugs, or otherwise, the drugs should be taken continuously for second course. After taking drugs, irregular vagina hemorrhage usually arise. The amount is not massive, and it does not

need to stop taking compound *feng fang tang* or to taken drugs for stop bleeding. If irregular vagina hemorrhage comes up again in the non-drug-taking period and urine pregnancy test is still negative after urine pregnancy test is negative, it can be treated as irregular menstruation. Drugs for nourishing blood can be added for anemia, drugs such as *zi cao* and *ban zhi lian* can be added to enhance anticancer action for patient whose urine pregnancy test is till positive after one course of treatment. Five cases are treated, urine pregnancy test of the patient has one or two births becomes negative after one course of treatment, and urine pregnancy test of the patient has four births becomes negative after more than two courses of treatment.

[case] patient *Feng*, female, 22. She suffered hydatidiform mole (the second birth) in 1967. She had irregular vagina hemorrhage after uterine curettage. Later, she received another two uterine curettages. Three urine pregnancy tests were all positive. The patient disagreed to receive hysterectomy. She was prescribed five doses of the formula mentioned above. After taking drugs, irregular vagina hemorrhage arose again and urine pregnancy test was negative. The follow-up revealed that she was pregnant next year and gave birth to a child.

10) *Bi* syndrome: it contains rheumatoid arthritis, rheumatic disease and hyperplastic spondylitis, etc.. If these diseases are severe and do not be cured by many treatments, the formula for expelling wind, scattering coldness and eliminating dampness simply is not effective. Doctor *Wang Kentang* considers that the pathogens such as wind, dampness, cold, heat, sprain, stasis, *qi* stagnation and phlegm are branches, and kidney deficiency is root. Wind, coldness and dampness are only external inducements, but kidney deficiency is internal nature indeed. External cause is the condition of changes, internal cause is the foundation of change, and internal nature takes effect through internal cause. Therefore, expected therapeutic effect can be achieved if supplementing kidney and tonifying *du* meridian are applied to strengthen the root, and dredging obstruction and collaterals are used to treat the branches. *Yi shen juan bi tang (wan)* is formulated according the rule. Judging from the therapeutic effect of 200 cases, the effect rate is 98%, cure rate is 75%, improvement rate is 23% and inefficient rate is 2%. The formula is *shu di huang 15g, dang gui 9g, feng fang 9g, xian ling pi 9g, lu xian cao 9g, dan cong rong 9g, zhi jiang can 9g, zhi wu xiao she 9g, zhi di bie chong 9g, zhi wu gong 1.5* (grinded into powder and taken by two times), *zhi quan xie 1.5g* (grinded into powder and taken by two times) , *gan cao 3g*, decoction, one dose a day. After taking five doses, ten times of doses of the drugs are grinded into powder and then made into pills as large as mung bean with decoction of *sheng di huang 150g, ji xue teng 150g, lao guan cao 150g, xun gu feng 150, sang zhi 150g, cang er zi 150g*, 6g every time both in the morning and evening. Pregnant women and menstruation are contraindications. *Zhi chuan wu 6g* and *zhi cao wu6g* can be added for cold dampness; *shu fu zi 12g* and *zhi huang qin 12g* for *yang* deficiency; *shi hu 9g*

and *mai dong* 9g for *yin* deficiency; *qiang lang chong* 9g and *pao shan jia* 9g for joint deformation. The pain usually is relieved after taking decoction, and the disease would be promoted and cured gradually after taking pills for 2 to 3 months. Tea of *Sheng di* 9g, *mai dong* 9g and *bei sha shen* 9g can be made for the patient who felt mouth dry after taking pills.

[case] patient *Wang*, female, cadre. She suffered increasing low back pain and flexure of spinal column from April, 1971. Her head tilt forward, she had humpback and could not stand straightly. She had low limbs pain, disfluency walk and joint deformation. She received west medicine, herbs and acupuncture, but no therapeutic effect. X ray of some hospital showed lumber vertebra hyperplasia and rheumatoid arthritis. She was prescribed prednisone and nerve block therapy, and asked to sleep on the bed with hard wood. She received no improvement and had to take antalgic drug to relieve pain. Due to difficulty in walk, his friend visited me with her x ray photo and case history on 15th, March, 1973. It was due to obstinate obstruction and the disease was so severe that the pathogenic factors had gone into bone, so it could not been cured without insect drugs. Low back is the house of kidney and lumbar vertebra is the place where *du* meridian passes, so drugs for supplementing kidney and tonifying *du* meridian should also added to treat both root and branches. *Yi shen juan bi wan* was prescribed. Second visit on 30th, April, 1974: low back pain was relieved a lot, she could sleep well and walk more smoothly and flexure of spinal column was relieved a little. The tongue was pale, coating was thin, and pulse was thin and rough. One course of drugs was prescribed. Third visit on 12th, July, 1974: the low back pain was cured, and she could walk erectly and do common work. She felt mouth dry, and coating was rough and slight greasy, tongue was red, and pulse was thin and wiry. There were symptoms of *yin* injury, so drugs for nourishing *yin* were added. *Mai dong* 90g, *sheng bai shao* 90g, *chuan shi hu* 90g were added. She was asked to take pills to enhance the therapeutic effect. Follow-up showed that everything was good. X ray showed no spur on 26th, April, 1975 by Nantong people's hospital.

Comment: Spur only in minority of cases would disappear. In majority of cases, the symptoms can be cured, functions would recover to normal state, but spur would not disappear.

11) Joint swelling: *qu tong jiu*: *feng fang* 60g, *sheng chuan wu* 15g, *sheng cao wu* 15g, soaped in 300ml of 75% alcohol for half month. The fluid is dipped by cotton bud to wipe the focus, or by gauze to cover the focus. It is most suitable for joint swelling with cold sensation, but for heat *Bi*.

12) Diphtheria and common throat pain: *long feng san*®: *feng fang* 1 (about 90 to 120g), *she tui* 1 strip, *feng huang yi* 6-8g, *xi gua shuang* 1.5g, *yuan cun* 0.3g, *mei pian* 1.5g. They are grinded into powder (the last three drugs are added after the first three drugs are grinded.). They are used to cover the focus for four or five times a day. The therapeutic effect is quite good.

13) Chronic bronchitis: Shuxian science and technology group of Anwei

province[®] uses *feng fang mo chao dan*, a folk empirical formula, to treat 203 cases of chronic bronchitis with 92.6%, 88.6% and 81.8% of efficiency rate. The main symptoms of 60% patient can be relieved within 3 days. Therefore, the therapeutic effect is not only good, but also quick. Through clinic observation, the formula can stop cough, eliminate sputum and relieve asthma, and also improve sleep, promote appetite and stop bleeding. 1.5 to 3 g of *lu feng fang* powder and one chicken egg are mixed in pan and stirred-baked without oil and salty. It is taken once or twice a day after meal. The side effect is that some patient would felt vertigo (4 cases), nausea (2 cases), diarrhea (2 cases), and palpitation (2 cases). It does not need to stop taking drugs.

[case] patient *Qiu*, male, 50, farmer. He suffered chronic bronchitis for 6 years, which aggravated in winter and induced by cold. The manifestations were frequent cough with much sputum, asthma and difficulty in lay down. PE: wheezing rale in both lungs. X ray: rough lung marking. BRT: leucocyte 11,000. The diagnosis was asthma type of chronic bronchitis, severe, deficient cold type. After taking drugs for two days, the cough was relieved a lot, sputum amount decreased, and appetite was improved from 62.5g of rice to 250g. After taking one course (10 days), the cough disappeared, sputum was relieved a lot and asthma was almost controlled.

The author treats many cases of chronic bronchitis by this formula with similar therapeutic effect, children in particular. For example, patient *Dai*, female, 5y, she suffered asthma type of chronic bronchitis for more than 3 years. The disease became severe gradually, relieved a little in summer and aggravated in autumn and winter. The manifestations were frequent cough and asthma, unsmooth discharge of sputum, difficulty in laying down, sweating and cold limbs, thin and greasy tongue coating, and thin and rapid pulse. It was due to cold phlegm in lung and failure of *qi* to ascend and descend. The treatment methods were warming lung, eliminating phlegm and stopping asthma. 30g of *feng fang* powder was prescribed. 2g of powder is stir-baked with one chicken egg. The symptoms ware promoted a lot after taking drug for 3 days and relieve thoroughly after 6 days. It is reported by her parents that the method was better than western medicine and herbs she had taken and that the therapeutic effect was steady.

Another folk formula for treating chronic bronchitis is taking 9g of *lu feng fang* and 9g of *gou teng* for 7 days. Through clinic observation, it is indeed effective to longy cough which has red complexion, rapid breath, snivel and tears when it breaks out.

14) Impotence: *zhi feng fang* is grinded into powder, and 6g is taken before sleep. The drug stops being taken when the therapeutic effect arises.

15) Furuncle: science and technology group of *fengtang* middle school of Chaoan county use *feng fang san*[®] to treat 60 cases of furuncle with 100% of efficiency rate. The focuses located on face and no other drugs were applied. It is worth popularizing. The formula is *feng fang 1*, *huang qin* 5g, *huang lian*

5g, *huang bai* 5g. *Feng fang* is burnt into dark brown color (not into ash), grinded into powder and then mixed the powder of other drugs. The drugs are used to cover the focus with rape oil. The drugs do not need to be changed if they are still kept. The pus would be discharged usually after 2 days, and the focus would scab and heal up after 3 days.

16) Pertusis: one *lu feng fang* is soaped in boiled water for four to five times until there is no red water, and then rinsed by clear water for several times. It is wrapped up by gauze and then decocted with two bowls of water and 50g of rock sugar. It is effective to pertusis.

Subsidiary drugs: *feng du*

Feng du is a kind of venom stored in the caudal region of worker bee, about 0.2mg to 0.4mg. It is fragrant in nature and bitter in flavor. *Feng du* is acid and contains melittin (many kinds of enzymes, more than ten kinds of free amino acids such as phosphoric acid and fatty acid, and formic acid). It has anti-hemolysis, anti-coagulation, anti-bacterium, anti-inflammatory actions, and can inhibit tumors in some degree in animal experiments. It is often used to treat rheumatics, rheumatoid arthritis, neuralgia, psoriasis, etc., in clinic, and also effective to hyperlipidemia, high blood pressure, arterial sclerosis, neuritis, tumor, etc..

In the recent years, it is also found that venom can resist the function of radioactive isotope. Therefore, it is a promising anti-radioactive drug.

The methods usually are that worker been is used to sting the focus, venom injection is applied by iontophoresis and venom is made into unguent for external use..

△ Clinic Handbook of Common TCM Internal Diseases page 65, Shanghai science and technology public house.

▼ experience introduction of *san sheng san* and *chan shu san* treating bone tuberculosis, Jiangsu TCM 6:12,1962.

① *shi yan*: it belongs to stone type in “*ben cao gang mu*”. It is sweat in flavor, cold in nature, nontoxic, and can dredge orifices, eliminate dampness and heat, treat eye nebula and diabetes.

② the formula of *Xia Yingtang*, a dead famous doctor of Shanghai

③ it is also called *wan ying qing liang gao*.

④ observation on therapeutic effect of 26 cases of acute mastitis treating by *lu feng fang*, TCM Journal, 11;7,1963.

⑤ treatment of 856 cases of thromboangitis obliterans, Clinical Date Compile of Achievements Exhibition of Combination of TCM and Western medicine, page 228, Shanghai.

⑥ application of *feng fang san* on bone tuberculosis, Heilongjiang TCM 6,1966.

⑦ observation on compound *feng fang tang* preventing 5 cases of choriocarcinoma of uterus, New Medicine 4:179,1974.

⑧ *Ge Dejun* ; original clinic observation of *long feng san* treating 43 cases of diphtheria, Jiangsu TCM, 1:20,1980

⑨ *feng fang mo chao dan* treating chronic bronchitis, science and technology information, 1973

⑩ *feng fang san* treating furuncle, *New Medicine* 8:57, 1972.

8 Zhi zhu (spider)

Zhi zhu belongs to arthropod animals, and there are many types. The author usually uses *cao zhi zhu* (just *hei zhi zhu* in doctor *Zhang Zhongjing's zhi zhu san*) which is from *Aranea Ventricosa* (L. Koch) and *hua zhi zhu* (a special spider of *Suzhou* city and mountain area of *Zhejiang* province). Their shapes are different and functions are also different.

Cao zhi zhu: it is slight cold in nature, slight toxic and attributive to liver meridian. It can break stagnation and dredge obstruction, and is good at treating *kui* ①. Doctor *Zhang Zhongjing* uses *zhi zhu san* to treat hernia effectively. It is also expert in dispersing stasis, resolving toxin, eliminating swelling and relieving pain. *Zhi zhu* can be put on the focus to drink the toxin to treat swelling and pain due to been or centipede bite. Big *zhi zhu* can be burnt and used with other drugs which can draw toxin and promote granulation to enhance the actions.

Hua zhi zhu: it is a little smaller than *cao zhi zhu* in shape, and is beautiful because of colorful maculation. So it is called *hua zhi zhu*. It is slight warm in nature, and attributive to kidney meridian. It is good at tonifying *yang* and supplementing kidney, is effective to impotence. The baked form is usually used, and often used as pill and powder formulas. One *hua zhi zhu* is enough for one day.

The clinical applications of *zhi zhu* are:

1) Pain due to hernia: 20 *cao zhi zhu* (washed by water, dried in the sunshine and baked on tile) are grinded into powder and taken by three times. They are taken with the decoction of *hu lu ba* 9g. The therapeutic effect is satisfied.

2) Furuncle: a big *cao zhi zhu* is put on the focus and pressed by adhesive plaster, changed once per half day or one day. Other methods should be applied if the drug does not take effect after two days. Pyemia should be treated by combination of western medicine and herbs.

Wuxi dafu community health center uses *ding ju san* to treat 30 cases of furuncle with good therapeutic effect. The formula is baked *zhi zhu* 6g, *duan hong xin* 6g, *zhi shou gong wei* 3g, *zhi jia yu tou* 9g, *zhi quan chong* 9g. They are grinded into powder and then mixed with the oil which is decocted from chicken egg yolk. After the focus being sterilized, furuncle head is ripped (blood oozing from the wound surface) by sharp knife, and drugs are filled into the wound and then covered by adhesive plaster and gauze. The cure time usually is 3 days, one day at least and one week at most. The drugs can eliminate swelling, draw pus and relieve pain. The drugs are slight toxic, so they should stop being used when swelling and pain are relieved.

3) Bite by centipede and hornet: a big *hei zhi zhu* is caught and put on wound to suck the toxin. After about half to one hour, the pain and swelling can be

relieved.

4) Stencosing tenovaginitis: *Ji Jinshi*, a doctor of Jinchang people's hospital of Suzhou province, uses *hei hu dan* for external use to disperse stasis, dredge collaterals, eliminate swelling and relieve pain. The formula is big *zhi zhu* 7, big *wu gong* 7 strips, *quan xie* 7, *chuan shan jia* 7 pieces, *she xiang* 3g, *gong ding xiang* 3g, *mu ding xiang* 3g, *bing pian* 3g, *hua shi* 3g. They are grinded into powder. 0.3g of powder is put on the focus and then covered by 4cm² of rubberized fabric. The drugs are changed once a day or two days in summer and autumn, or once per several days in winter and spring. Additionally, it also is effective to tennis elbow, scapulohumeral periarthritis and joint stiffness due to sprain, bruise, dislocate and fracture.

5) Mouth ulcer: doctor *Li Jingrui* uses *zhu fan san* ② to treat child mouth ulcer, once or twice a day. Mild case would be cured by using drugs for one time, and severe case would be cured by using drugs for three times. The formula is *zhi zhu* 6, *bai fan* 60g, *bing pian* 0.15g. *Bai fan* is calcined in marmite and the *zhi zhu* is added. When *bai fan* is calcined into *ku fan*, the fire is taken off and *zhi zhu* is picked out. After *bing pian* is added, they are grinded into powder. *Zhi zhu* resolves toxin, eliminates swelling, promotes granulation and treats carbuncle; *ku fan* dries dampness, kills parasite, stops bleeding and relieves pain; *bian pian* is good at treating mouth ulcer, and can clear fire and relieve pain.

It is reported by doctor *Tian Zhigao* that *zhi zhu ku fan san* ③ can effectively treat infantile thrush (noneffective to *yin* deficient syndrome, manifesting as red tongue without coating, and circle and small ulcer). The formula is similar to that one mentioned above, however, the *bian pian* is replaced by *ming xiong huang*.

[case] patient *Tian*, female, 2. She suffered thrush. The ulcers spread from cheek to throat, tongue, gum, maxilla and lip. She had dysphagia and dyspnea. She received little therapeutic effect by western medicine and herbs. She was prescribed *zhi zhu ku fan san* for external use, and was cured after using drugs for four times.

6) Bloody stool: folk empirical formula is *zhi zhu* 7 (washed by cold boiled water) and one chicken egg. *Zhi zhu* is put into egg which then is enveloped by earth. They are forged in carbon by fire keeping its nature, and then grinded into powder. It is taken with water for treating bloody stool effectively.

Comment: it is never recorded by herbs books that *zhi zhu* can treat bleeding. However, "*tui zhai xian lu*" wrote by doctor *Hou Yanshang*, says that only one dose of big cobweb is enough for acute hematemesis taken with rice water. Since cobweb can stop bleeding, so can *zhi zhu*. One patient suffered bloody stool for three years, and was cured only by one dose. The therapeutic effect can be observed further in the clinic.

7) Underarm odour: one big *zhi zhu* is enveloped by earth and then is burnt into ash. It is grinded into powder and mixed with the same dose of *qing fen*. The powder is used to cover the washed location, once in the evening, for 4 to

5 days (6313 hospital of the Chinese People's Liberation Army).

8) Formula for curing appendicitis radically: conservative treatment, such as clearing heat, resolving toxin, activating blood and eliminating swelling, is effective to appendicitis. However, some cases often are easy to reoccur. There is a formula for radical cure in "*jia ting ying yong liang fang*" (good formulas for family application), composing of five drugs with proper compatibility. Probation confirms its efficiency. The formula is old *zhi zhu* 2, *jiang can* 6g, *chan tui* 6g, *wu gong* 3g, *da huang* 3g. They are grinded into powder and taken with Shaoxing wine before meal. The functions are dispersing stasis, dredging obstruction, resolving toxin, softening hardness and drawing rot. When clinical symptoms of appendicitis are controlled, the formula is used to prevent reoccurrence.

9) Swelling: a folk formula, five big *zhi zhu* and proper dose of refined white sugar and calcareousness are pounded and then used to cover the focus once a day, is effective.

It is reported by doctor *Song Changgui*, et al, that *zhi zhu sai dan* ④ (one or two live big *zhi zhu* are filled into a chicken egg. After the hole is seal off, the egg is steamed. Egg shell and *zhi zhu* are removed. One egg is taken a day, for 7 to 10 days.) is effective to multiple and recrudescence furuncle without any side effect.

10) Infantile malnutrition: one *zhi zhu* is filled into a chicken egg and steamed. The *zhi zhu* is removed, and the egg is taken once a day, for 5 to 7 days.

11) Asthma type of chronic bronchitis and asthma: three *zhi zhu* caught in the summer are enveloped by paper and hung under eaves until the Beginning of Winter. Then they are stir-baked, grinded into powder, mixed with honey and Shaoxing wine in the bowl, and then steamed. They are for oral administration once a year.

12) Impotence: there are two reasons for impotence. The first one is over-work and over-thought injuring spirit, consuming essence and blood and resulting in kidney essence deficiency. The second one is damp-heat in liver meridian going down. The latter type can be treated by *long dan xie gan tang* to clear liver fire and eliminate dampness. It is quite easy to be cured. However, the former type is quite difficulty to be cured. The empirical formula called *zhi feng wan* is nearly satisfied. The composing is *hua zhi zhu* 30 (slight baked), *zhi feng fang* 60g, *shu di huang* 90, *zi he che* 60g, *xian ling pi* 60g, *dan cong rong* 60. They are grinded into powder and then made into pills with honey as large as mung bean, 6g to 9g every time and twice a day. Two *hai gou shen* or *huang gou shen* are added for severe case in order to enhance the therapeutic effect. *hua zhi zhu* and *lu feng fang* can warm kidney and tonify yang, and *shu di*, *zi he che*, *xian ling pi* and *cong rong* can supplement liver and kidney.

Comment: the disease would reoccur in some patients who are extreme fatigue and emotion depression. The pills can be taken again, and the

therapeutic effect would also arise.

[case] patient *Xu*, male, 29, teacher. Due to deficient constitution and overwork, *yin* fluid was consumed and liver and kidney was injured. In the recent two years, he got prospermia at first, and then suffered impotence. He also had vertigo, tinnitus, poor memory, palpitation and weak waist and low limbs. The tongue was pale, coating was thin, and pulse was thin and soft, and weak in *chi* location. He received herbs, western medicine and acupuncture with little therapeutic effect. He was prescribed *zhi feng wan*. After taking drugs for one week, he received therapeutic effect. Before the drugs were finished, the disease was cured.

13) Fistula of hemorrhoids: if the fistula forms in hemorrhoids, the disease is so obstinate that common drugs can not take effect. But *zhi lou xiao guan fang*, which is composed of insect drugs such as *hua zhi zhu*, is quite effective. *Hua zhi zhu* can warm kidney, promote the recovery of body, draw antiquated substance and promote generation, and is good for the coalescent of fistula. *Qiang lang chong* and *shui ma* are good at eliminating fistula and drawing antiquated substance. So the therapeutic is quick. The formula is *hua zhi zhu 7, qiang lang chong 3, shui ma 50*. They are all baked into ash in tile, and then grinded into powder with a little dose of *bing pian* and *she xiang*. The powder is used to cover superficial fistula, and put into deep fistula which then is covered by adhesive plaster. The drugs are changed once a day or two days. After the drugs are applied, the fistula changes into pus gradually and tissue would grow.

Comment: although both *feng fang* and *zhi zhu* belong to the drugs for warming kidney and tonifying *yang*, *hua zhi zhu* is good at warming kidney and tonifying *yang*; *feng fang* not only warms kidney, but also can tonify and regulate functions of the whole body. So *feng fang* is also effective to obstinate and severe *Bi* syndrome, bone tuberculosis, ulcer, tumor and cancer. Although both *feng fang* and *cao zhi zhu* can resolve toxin, *cao zhi zhu* only can treat insect bite, the application rang of *feng fang* is larger and can be used for carbuncle, furuncle and tumor. Therefore, there are differences in the common functions. The application rang of *feng fang* is the largest, and *hua zhi zhu* and *lu feng fang* have their own advantages. They should be selected carefully in order to make effective use of their advantages.

① *kui*: it refers to the disease which has symptom of scrotum pain, including hernia and orchitis.

② empirical formula for infantile mouth ulcer, TCM Journal, 4:13, 1966

③ *zhi zhu ku fan san* for infantile thrush, New TCM, 2:50, 1975

④ *zhi zhu sai ji dan* for furuncle, Jiangsu TCM, 4:63, 1975

9 jiu xiang chong

Jiu xiang chong is dried whole body of *Aspongopous Chineusis Dallas*, produced in Jiangsu, Anwei, Zhejiang, Hu'nan, Hubei, Guizhou and Sichuan. It is salty in flavor, warm in nature, nontoxic, and attributive to liver, spleen and

kidney meridians.

The functions are (1) supplementing spleen and kidney, (2) tonifying original *yang*, (3) soothing liver, (4) scattering stagnated *qi*. It is good at treating pain due to liver depression and *qi* stagnation. There are three main indications. First one is stomachache due to hyperactivity of liver *qi*, manifesting as stable, prickly and paroxysmal pain which is located to hypochondrium and upper abdomen or flows transversely. It is not suitable for the pain which goes up and down. The second one is hypochondrium pain due to syndrome of liver depression and *qi* stagnation or syndrome of liver depression and blood stasis of hepatitis. The last one is fierce back pain, such as back obstructive pain due to damp *Bi* syndrome without pain in other places, or wandering pain which is located to back. Drugs for soothing liver and regulating *qi* can be added for stomachache due to hyperactivity of liver *qi*; drugs for activating blood and dispersing stasis such as *shen san qi* can be added for hypochondrium pain due to chronic hepatitis; *ge gen*, *qin jiao*, etc., can be added into the formula which can regulate *qi* and meridians for back obstructive pain. *Jiu xiang chong* is not suitable for wandering abdominal pain, unstable epigastric pain or pain due to ulcer. It can not relieve these kinds of pain and make them severe because of its nature of fleeing hither and thither. Therefore, the symptom should be differentiated carefully before *jiu xiang chong* is applied. Because of its function of soothing liver and regulating *qi*, it is added into regular drugs for abdominal distention due to intestine synechia after surgery and pain due to gallstone or urine system stone in the recent years. It is also can be used for nervosism due to its function of supplementing spleen and kidney and tonifying original *yang*.

Jiu xiang chong contains fat, protein and chitin. The fat includes stearic acid, palmitic acid and oleic acid. It is confirmed by experiments that it can powerfully inhibit *Staphylococcus aureus*, *Bacillus typhi.*, *alpha Bacillus paratyphosus* and *Sh.flexneri.*.

10 to 15 minutes later after taking drugs, the patient will feel *qi* fleeing hither and thither like Betun syndrome and hear rugitus, sometimes accompanied with belch and fart. The distention or pain will disappear after 15 to 30 minutes.

Because *jiu xiang chong* is warm in nature and can warm kidney and tonify *yang*, ascent of liver and gallbladder fire and red tongue due to *yin* deficiency are contraindications. Or drugs for nourishing *yin* and soothing liver are added. The dose is 3 to 6g for decoction, and 0.6 to 1.2g for powder and pill. The clinical applications are:

1) Stomachache due to hyperactivity of liver *qi*: this syndrome can be effectively cured mainly by *jiu xiang chong* with the help of drugs for regulating *qi*. The formula is *jiu xiang chong* 4.5g, *ju he* 9, *li zhi he* 9g, *tian shi li* 9g, *ba yue zha* 9g, *xiang yuan pi* 9g, *gan cao* 3g, decoction, one dose a day. *Ba yue zha* (bitter and cold) should be removed for deficient cold of spleen and stomach, and *guang mu xiang*, *sha ren*, *chao bai zhu*, *lu dang shen* should be

added. *Zuo jin wan* can be added for fire stagnation. The therapeutic effect would be better if the formula is modified according to syndrome. Another formula is *jiu xiang chong 9g, pu gong ying 9g, sha ren 9g, chen xiang 3g, tan xiang 3g*. They are grinded into powder and filled into 15 parcels, one parcel every time, three times a day. It is also effective for neural stomachache.

[case] patient *Huang*, female, 29, worker. She suffered stomachache due to hyperactivity of liver *qi* for long time. It could be induced by overwork, coldness and emotional depression. The manifestations were abdominal distention which radiates to hypochondrium and was prickly pain. It can be relieved by drugs and rest. The tongue was red, the coating was thin and white, the pulse was wiry and thin, left *guan* location in particular. It was due to emotional depression, transverse invading of liver *qi* into stomach, so soothing liver, resolving depression, regulating stomach and relieving pain were applied. The formula mentioned above and *wei jin ling zi 9g, sheng bai shao 9g* were prescribed. The pain was relieved a lot by one dose and stopped by two doses. The drugs for regulating liver and supplementing stomach are prescribed to enhance the therapeutic effect. The disease did not reoccur for ten years until now.

2) Hypochondrium pain due to hepatitis: hypochondrium pain in hepatitis usually is caused by liver depression and blood stasis. It is so obstinate that it becomes a big threat to patient's spirit. If the patient only complains hypochondrium pain, *ning tong wan* can be prescribed directly. *Jiu xiang chong* can be added into the formula according to syndrome differentiation for complicated condition. *Ning tong wan* is composed of *jiu xiang chong 150g, shen san qi 200g, zhi quan xie 100g*. They are grinded into powder and made into pills with water as large as *su zi*, 1.5g every time, twice a day. They are taken with water. Pain usually begins to be relieved after taking drugs for one or two days. The drugs can be taken once in the morning when pain reduces. The drugs stop being taken when the pain is relieved.

[case] (1) patient *Zhang*, male, 30, teacher. He suffered jaundice in October, 1962. He was hospitalized and the disease was improved after being treated for more than 2 months. Then he went to sanatorium. But he did not be cured thoroughly until then. The manifestations were vertigo, fatigue, bitter mouth, poor appetite, prickly and fierce hypochondrium pain, insomnia, palpitation, poor memory, weak low back and spermatorrhea. Liver extended ribs for 3 cm, and spleen extended ribs for 1 cm. the pulse was wiry and thin in *cun* and *guan* location, and weak in *chi* location, the tongue was purple, and coating was thin and greasy. The syndrome belonged to liver depression, blood stasis, spleen deficiency, dampness stagnation and deficiency of both heart and kidney. The manifestations were relieved by drugs for soothing liver, resolving depression, activating blood, dispersing stasis, supplementing spleen, eliminating dampness, supplementing heart and kidney, but prickly hypochondrium pain was not relieved. Therefore, *ning tong wan* was prescribed, 1.2g twice a day. He received obvious therapeutic effect after two

days, and the disease tended to steady condition when he continued to take drugs for one week.

(2) patient *Yang*, male, 36, cadre. His liver extended ribs for 5cm and spleen extended ribs for 1cm two years ago, and he was diagnosed as hepatitis. The disease was improved by continuous treatment, but hypochondrium pain did not be relieved. Other manifestations were abdominal distention sometimes, frequent fart, constipation, insomnia, white, thin and greasy coating, large tongue body, thin, weak and wiry pulse. It was due to liver depression, *qi* stagnation, blood stasis, dysfunction of spleen, failure of *qi* to descend and ascend, so promoting *qi* circulation, activating blood, nourishing liver and regulating spleen were applied. The formula was *dan shen* 9g, *hong hua* 9g, *chao ju he* 9g, *tian shi li* 9g, *gua lou ren* 9g, *bai zi ren* 9g, *jiu xiang chong* 2g, *shen san qi* powder 1.2g (swollen with decoction), *sheng mai ya* 15g, five doses. The hypochondrium pain began to be relieved after taking two doses, and sleep became good by continuous administration. There still were abdominal distention, rugitus, constipation, white and greasy coating, and wiry and thin pulse. They were caused by disharmony of liver and spleen, so *fa ban xia* 6g, *da fu pi* 9g, *fu chao zhi ke* 1.5g were added. After taking drugs for another five doses, hypochondrium pain was relieved by and large, and other symptoms were also improved a lot. The formula was modified for him to enhance the therapeutic effect.

3) Intestine synechia after surgery: it is due to *qi* stagnation and blood stasis. "*ling shu·bai bing shi sheng pian*" said, if the collaterals of intestine is injured, blood flows out the intestine and combat with cold juice out of the intestine; they agglomerate and do not scatter changing into mass. It accords with the pathogenic mechanism of intestine synechia. Therefore, regulating *qi* and blood are applied, assisted by activating spleen. On the basis of treatment according to syndrome differentiation, *jiu xiang chong* is added.

[case] patient *Chen*, female, 37, worker. She received hysteromyomectomy three months ago. In the recent two months, she had poor appetite, abdominal distention, constipation, weak bowel movement. They did not improved by more than forty doses of herbs for promoting *qi* circulation and eliminating distention. She was diagnosed as mild synechia of ileocecal part, moved appendix III° and allergic colitis by barium meal examination in first people's hospital. The coating was white and rough, the pulse was thin. It was due to spleen deficiency, *qi* stagnation, blood stasis and meridians obstruction. The treatment methods were supplementing spleen, regulating *qi*, activating blood and harmonizing meridians. The formula was *quan dang gui* 12g, *xu chang qin* 12g, *jue ming zi* 12g, *fo shou pian* 12g, *jiu xiang chong* 4g, *guang mu xiang* 6g, *ju he* 9g, *li zhi he* 9g, *tai wu yao* 9g, *gan cao* 4.5g, four doses, one dose a day. Second visit: abdominal distention was relieved a lot, and she had rugitus, fart, thin and greasy coating, thin and slight wiry pulse. The drugs did not need to be changed because of therapeutic effect. *Sang ye* 9 and *ju hua* 9g were added for red eyes. Third visit: the abdominal distention

was relieved thoroughly, but low abdomen was uncomfortable. She had stool once or twice a day, thin and rough coating, and thin pulse. Supplementing spleen, regulating *qi*, activating blood and harmonizing meridians were applied. The formula was *dang gui 12g, xu chang qin 12g, jiu xiang chong 3g, ju he 9g, li zhi he 9g, tai wu yao 9g, tao ren 9g, wu mei tan 4.5g, gan cao 4.5g*. She was cured after taking six doses of drugs.

4) Gastric cancer: it is introduced by some hospital of shanghai that the followed formula has some therapeutic effects for gastric cancer. The formula is *jiu xiang chong 9g, teng li gen 90* (decocted early for 2 hours), *long kui 60g, tie ci ling 60g, shi jian chuan 30g, niao bu su 30g, gui jian yu 30g, wu hua guo 30g. quan gua lou 30g* is added for constipation, *jiang ban xia 15g* for vomiting, and *tian shi li 15g* for pain.

5) Cholecystolithiasis: *jiu xiang chong 6g* and *mang xiao 4.5g* (taken after mixing it with the decoction) are added into *san jin tang (jin qian cao 30g, guang yu jin 9g, ji nei jin 9g)* relieving pain and promoting the discharge of stone for cholecystolithiasis.

[case] patient *Wang*, female, 42. She suffered chronic cholecystitis for six years. In the recent years, she often felt prickly pain in gallbladder area, and suffered nausea and vomiting. Other manifestations in this reoccurrence were fever, jaundice, Murphy sign (+), yellow and greasy coating, wiry and rapid pulse. It was due to liver and gallbladder depression, *qi* stagnation and damp-heat. The treatment methods were soothing liver, regulating *qi*, dredging gallbladder and promoting discharge of stone. *Pu gong ying 30g* was added into the formula mentioned above. The disease was improved by three doses, and was cured by six doses.

6) Low back pain due to kidney deficiency: with the help of *shu di, du zhong, gou ji, yi zhi ren, sang ji sheng*, etc., *jiu xiang chong* is effective to low back pain due to kidney deficiency.

10 ***qiang lang chong*** (dung beetle)

Qiang lang chong (*Catharsius molossus* L.) is also called *tui che chong* (vehicle-pushing insect) and *tie jia jiang jun* (armoured general). It is produced in every province, cold in nature, salty in flavor, nontoxic and attributive to liver, stomach and large intestine meridians.

It can break mass, promote urine and defecation, stop convulsion and epilepsy, draw toxin, promote granulation, eliminate swelling and stop bleeding. It is suitable for both oral administration and external use, and the applications are wide. But it is considered as a severe drug from Song and Yuan Dynasty. Therefore, it is often used for surgical diseases by external use, not indiscreetly used for internal diseases. Through reviewing literatures and referring to the author's clinical experience, there are four main functions for internal diseases.

1) Obstinate constipation: ancient books have already record this function. For example, powder of *qiang lang chong* is taken with hot wine for constipation in "*sheng hui fang*"; doctor *Gong Tingxian* uses *qiang lang san* to

treat constipation in “*wan bing hui chun*”; it is also pointed out that *qiang lang chong* can treat constipation, anuresis and dysentery. Doctor *Wang Mengying* is expert in applying *qiang lang chong*. He uses it to treat constipation with vomiting stool, constipation due to heat toxin and constipation caused by *qi* stagnation and fluid deficiency. The author uses it to treat abdominal pain and constipation due to incomplete intestinal obstruction and intestine synechia. The therapeutic effect is quite good.

2) Wind-dampness obstruction pain: doctor *Ye Tianshi* like to use it to treat general obstruction whose duration is decades with the help of other insect drugs. The therapeutic effect is powerful because of its functions of dredging meridians and collaterals, dredging obstruction and extending *yang*. It can be used with *feng fang* for rigid, swelling and anamorphic joints.

3) Cancer and hard mass: because it can break mass, draw toxin and eliminate swelling, *qiang lang chong* can be used for cancer of digestive tuber and bladder.

4) Dysentery: doctor *Li Yanshou* uses *hei niu san* to treat reddish and whitish dysentery, anorectic dysentery and excessive diarrhea. *Qiang lang chong* is baked and grinded into powder, and 1.5g to 3g is taken every time with samshu. It is suitable for beginning of dysentery with strong body because it can go into hand *yang ming* and foot *yang ming* meridians, and promote defecation to draw obstruction. Due to its cold nature, it can resolve heat toxin. It is good at relieving pain, so it also has anticonvulsants action. It is an important drug for infantile convulsion and infantile malnutrition.

It is reported that *qiang lang chong* can promote the discharge of stone for bladder stone in the recent years.

It is reported by Japanese Pharmacy Journal ① that about 1% of toxin is extracted from two types of *qiang lang chong*. The toxin can dissolve in water, alcohol and chloroform, and does not dissolve in aether. It would be damaged by 100°C for thirty minutes. The pharmic actions are that 1) mice would be restless after being injected by toxin and died from spasm tens of minutes later; 2) the blood pressure would decrease temporarily and then increase, and amplitude and frequency of breath would increase when rabbit is infected by the toxin; 3) the toxin can inhibit the isolated heart of toad; 4) the vessel of low limbs would enlarge temporarily when the toxin is affused; 5) bowel and uterus of rabbit can be inhibited by the toxin; 6) the toxin can paralyze the neuromuscular sample of toad. These experiments afford us clue for further research.

The baked form is usually used. The dose is 4.5g to 9g for decoction, and 1g to 2g for powder. The action of powder is more powerful than that of decoction. The clinical applications are:

1) stool-vomiting: this symptom usually is caused by intestinal obstruction. *Qiang lang chong* used as main drug can effectively relax intestinal obstruction because of its attacking and fleeing nature. It is most suitable for acute outbreak of incomplete intestinal obstruction and should be assisted by

other drugs according to syndrome differentiation. Surgery should be applied right away if local necrosis forms because of longy duration.

[case] patient *Zhang*, male, 41, farmer. He suffered acute and fierce abdominal pain yesterday because he walked too fast carrying heavy thing after meal. The pain could not be relieved by *zhi tong pian* and *shi di shui*, and became severer in the evening. There was strip rise in abdomen. He vomited acid and bitter water, and stool. There were no stool and fart. The pulse was deep and wiry, coating was turbid and greasy. It was due to food stagnation, *qi* closure and failure of *qi* to ascend and descend resulting in tangible turbidity and obstructed bodiless *qi*. These were the reasons for stool-vomiting and abdominal pain. Dispersing by pungency, descending by bitterness, relieving stagnation and eliminating turbidity were applied. *Zhi qiang lang chong* 9g, *xuan fu hua* 9g, *sheng zhi shi* 9g, *li zhi he* 9g, *ju he* 9g, *sheng zhe shi* 30g, *chuan lian* 1.5g, *qing pi* 6g, decoction. After taking two doses, stool-vomiting was stopped, abdominal pain was relieved, but there was still no stool. *Guang mu xiang* 4.5g and *bing lang* 9g (milled for juice) were added into the formula. The stool was smooth and abdominal pain was relieved thoroughly after taking drugs.

Comment: it is reported that *qiang lang chong* 7, *hei bai chou* 9g and *shi chang pu* 9g, decoction, once a day are effective to paralytic intestinal obstruction. They do not stop being taken until the stool is smooth.

2) Intestine synechia after surgery: the manifestations usually are vomiting, abdominal pain and no stool. In the recent decades, the therapeutic effect is satisfied that *qiang lang chong* is added into formula according to syndrome differentiation. *Chang nian lian wan* also is good. The formula is *chi shao* 90g, *bai shao* 90g, *dang gui wei* 90g, *chao mai ya* 90g, *hong teng* 90g, *chen pi* 60g, *qiang lang chong* 60g, *zhi gan cao* 60g, *tai wu yao* 45g, *du hong hua* 45g. They are grinded into powder and then made into pills with water as large as phoenix tree seed. 9g of pills are taken every time, twice a day.

[case] patient *Li*, female, 24. She received surgery because of acute appendicitis. She was found that it was complicated by intestinal tuberculosis during the surgery. Through longy treatment, the wound coalesces, but intestinal synechia and obstruction came up. The manifestations were abdominal pain, vomiting, no stool and fart during outbreak, poor appetite and sleep, thin and weak body and poor spirit. She was treated for three years without therapeutic effect. The pulse was deep, wiry and rough, the coating was thin, greasy and dry. She was prescribed *xuan fu dai zhe tang* and *si mo yin* added by 9g of *qiang lang chong*. There was fart after taking drugs. After taking three doses, pain and vomiting was relieved gradually, the stool became smooth, the appetite was promoted, and the spirit was better. The formula for supplementing *qi*, nourishing blood, moistening intestine and regulating stomach was prescribed for continuous treatment. After then, the formula mentioned above was still effective for outbreak.

3) Ascites due to liver cirrhosis: it is usually due to blood stasis, water and

dampness stagnation, therefore, soothing liver, relieving depression, dispersing stasis, softening hardness, eliminating water and dampness are applied. Supplementing spleen and kidney should be applied for longy duration and weak body. *Xiao zhang chu shi tang* (*qiang lang chong* 6g, *mu gua* 6g, *tong cao* 6g, *yan hu* 6g, *yu jin* 6g, *hong hua* 3g, *qian cao* 3g, *yuan zhi* 3g, *si gua luo* 1, *lu lu tong* 10, *sheng yi ren* 24g, *fo shou* 9g, *xiang yuan pi* 0.5, decoction) is record in doctor *Chen Shiduo*'s "*shi shi mi lu*". It can activate and regulate blood, soothe liver, promote *qi* circulation, eliminate distention and dampness. It is confirmed by *Liu Duzhou*, a doctor of *Beijing* TCM College, that it is effective to ascites of liver cirrhosis. If the formula does not take effect, *an wo zi tang* (*an wo zi* 12g, *chao shui zhi* 6g, *sheng mu li* 24g, *hai zao* 12g, *tao ren* 9g, *cang zhu* 9g, *ji nei jin* 9g, *shang lu* 9g, *fu ling* 15g, *bai mao gen* 30g, *che qian zi* 30g, *shang rou gui* 1.5g. *dang shen* 21g can be added for weak body.) can be taken. It can powerfully promote urination, eliminate distention and disperse stasis.

4) Gastric cancer: it is due to *qi* stagnation, blood stasis, phlegm stagnation, toxin obstruction. Therefore, the treatment should be applied depending on pathogen.

(1) *wei ai san*: *qiang lang chong* 30g, *cong sha* 30g, *xi yue shi* 30g, *huo xiao* 30g, *di bie chong* 30g, *wu gong* 30g, *shou gong* 30g, *bing pian* 15g, *lv e mei* 15g. They are grinded into powder, 1.5g every time, three times a day. This is a basic formula for gastric cancer. The functions are promoting *qi* circulation, relieving pain, attacking toxin, defeating cancer, breaking blood and dispersing stasis. The formula for clearing heat, cooling blood, supplementing healthy *qi*, descending converse can be selected according to syndrome.

(2) combination of TCM and western medicine for terminal gastric cancer: surgical department of Changzhou first people's hospital ② make follow-up of 113 cases of gastric cancer patient which are confirmed by pathology during 1965 to 1968, revealing that there are 9 cases (7.9%) whose have survived for more than five years. Four cases are terminal gastric cancer, and have metastasis of perigastric lymph node. Two cases are unable to receive resection and only receive gastrojejunostomy. Five-year survival rate is very low in the past, and has been promoted by combination of TCM and western medicine. Besides chemotherapy after surgery, they take insect drugs and plant drugs.

[case] (1) male, 42. he suffered paroxysmal epigastric pain for three years. It became severer in these months, accompanied with nausea, vomiting slop and water, constipation and thin body. He was hospitalized on 16th, November, 1965.

PE: poor nutrition, anaemic appearance, soft abdomen, mass (-). Laboratory test: RBC 168,000, WBC 4600, N 63%, L 30%, A 7%. X ray: cancer in sinus ventriculi, carcinous ulcer or chronic ulcer perforation, malignant change of ulcer.

Surgery: there was mass 4cm* 6cm in lesser curvature of stomach, infringing

upon pylorus, head and body of pancreas. The mass was hard. Cancer had diverted to nodes of omentum and mesentery. Because the range of metastasis was wide, only gastrojejunostomy was done. Nodes were selected for pathological test.

Pathological diagnosis: metastatic and undifferentiated carcinoma of large omentum nodes.

The patient insisted on taking herbs both for supplementing and reducing (every two months). He survived for 7.5 years. He could do common housework, and died from local reoccurrence and jaundice in May, 1973.

The formula for supplementing was modified *shi quan da bu tang*: *chuan xiong 9g, bai shao 9g, shu di 9g, bai zhu 9g, fu ling 9g, chen pi 9g, dang gui 15g, dang shen 15g, ji xue teng 15g, gan cao 6g*.

The plant drugs for reducing were *shi da chuan 30g, she she cao 30g, tie shu ye 9g, mu bie zi 1.5g*, and insect drugs were *qiang lang chong 9g, feng fang 9g, tian long 6g, quan chong 6g, shui zhi 1.5g, wu gong 1.5g*.

(2) male, 49. He had suffered gastric disease for two years and had blood-vomiting history. He suffered poor appetite, increasing epigastric distention and increasing thin recently. He was hospitalized in September, 1965.

PE: anaemic appearance, soft abdomen, mass (-). Laboratory test: normal liver function, RBC 172,000, hemoglobin 32%, WBC 4100, N 70%, L 29%, A 1%. X ray: cancer in sinus ventriculi.

Surgery: there was mass 5cm*3cm* 4cm in sinus ventriculi. It was hard and adhesive to transverse mesocolon. There was metastasis in nodes of large and small omentums. Gastric, large and small omentums resections were done and send for pathological test.

Pathological diagnosis: adenocarcinoma of sinus ventriculi (stage III degree III), infringing upon serosum, metastatic adenocarcinoma of large and small omentum nodes.

He took thiotepa after surgery. After leaving hospital, he insisted on drinking water which had cooked water caltrop. He also took *qiang lang chong 9g, wu gong 6g, tian chong 6g, shui she 3g, bi hu 1*, ten doses every three months.

He had survived for more than nine years. Reexamination showed good condition and X ray showed unobstructed stoma in June, 1975. He resumed to work.

5) Bladder cancer: it is introduced by some hospital of Shanghai that *qiang lang chong 9g, she she cao 60g, ban zhi lan 60g, ye tu pao 60g, he bai cao 30g, jin cha shi 30g*, decoction. *Wu ming yi* ③15g is added of bloody urine, *shi xie 30g* and *hui xiang 9g* for dysuria. They are effective to bladder cancer.

6) *yin* furuncle: it can effectively treated by modified *ba jiang dan*. The formula is *qiang lang chong, lu feng fang, chan yi, zhi jiang chan, zhi shan jia, quan xie, wu gong, wu bei zi*. The drugs with some dose are grinded into powder. 1g of *she xiang* is added into 30g of powder.

Comment: *ba jiang dan* is record by “*yang yi da quan*”, and doctor *Li Renzong* invents modified *ba jiang dan* referring to the meaning of *ba jiang*

dan. The formula contains insect drugs, and can eliminate carbuncle and swelling, activate blood, disperse stasis, draw pus and toxin, discharge staleness and promote generation. It is suitable for *yin* furuncle, not for *yang* furuncle. His two cases are record here for referring.

[case] (1) patient *Ma*, male, 5. He suffered lung tuberculosis and carbuncle in head. The carbuncle is pale, little fatty pus and extreme pain by pressure. Modified *ba jiang dan* was put on *tai yi gao* and then covered focus, changed twice a day. He was cured after six days.

(2) patient *Tang*, male, 17. There was a *yin* furuncle on the right leg. He was treated by *shi quan da bu tang* and modified *ba jiang dan* (cotton thread with drugs were filled into focus for two *cun*.). He was cured after half months.

7) Fistula: it is caused by perforation of cold carbuncle, and has dripping pus. It is extreme difficult to be cured. The formula followed can disperse stasis, eliminate swelling, attack hardness, draw pus and toxin, expel staleness, promote granulation and coalesces, and is effective to this symptom. *Qiang lang chong* 8, *qiu yin* 30g, *xiang pi* 30g and *pao jia* 30g are baked by sesame oil, grinded into powder, and then made into pills with honey as large as mung bean. 2g is taken with water after meal every time, twice a day. Additionally, one *qiang lang* and three strips of *yan you* are baked on tile, grinded into powder, and added by *bing pian* 1g and *chan shu* 0.3g. They are mixed with rape oil, and then used to drop into fistula covered by adhesive plaster, changed once a day. The therapeutic effect is extreme good.

8) Infantile malnutrition: there is a folk formula that one *qiang lang chong* is washed, dried, enveloped by earth and then roasted. It is grinded into powder without wings and feet. The powder is taken with sugar once a day. Several days later, it will take effect. It is the result of drawing staleness, promoting generation and improving the function of stomach and intestine.

9) Bullet injury: *qiang lang chong* and castor bean are grinded into powder with same dose. They are mixed with tea water to cover the focus.

10) Dysentery: ten *qiang lang chong* is burnt into carbon keeping its nature, grinded into powder. 1.5g to 3g is taken with wine every time for adults.

11) Prolapse of the anus: *qiang lang chong* is baked, grinded into powder, and then mixed with sesame oil. They are used to cover the focus.

12) Multiple bone and dead bone: obstinate carbuncle and furuncle which has a long duration usually because of multiple bone and dead bone inside. Doctor's *lin wu shan ren*'s *Tui che san* (*qiang lang chong* is baked. 1.5g of *sheng jiang* is added into 30g of *qiang lang chong*. They are grinded into powder.) can be used to cover the focus. The multiple bone and dead bone would be discharged after several days. Then *sheng ji san* is used to promote coalescing.

Comment: although both *jiu xiang chong* and *qiang lang chong* can relieve pain, *jiu xiang chong* can promote *qi* circulation, *qiang lang chong* acts on organic parenchyma; *jiu xiang chong* is suitable for the upper diseases (epigastric and hypochondrium area), *qiang lang chong* is suitable for

abdominal diseases; *jiu xiang chong* is good at regulating *qi* and warming kidney *yang*, *qiang lang chong* is expert in breaking mass and promoting urine and defecation. These are the points which have to be paid attention to.

①pharmacological actions of *qiang lang chong*, Japanese Pharmacy Journal 16:3 page 68—69 ,1933.

②combination treatment of western medicine and herbs on terminal gastric cancer, Chinese Journal of Clinic Assemble, 10:750,1975.

11 *di long* (earthworm)

There are many types of *di long*, and the distributed area is wide. It is known that there are more 2500 kinds in the world, and more 250 kinds in China. The whole body of *Pheretima aspergillum* (*guang di long*) or *Allolobophora caliginosa* trapezoids (*tu di long*) is used mainly as drugs. It is also called *qiu yin*, its popular name is *qu shan*. The action of *Guang di long* is more powerful, mainly produced in Guangdong and He'nan provinces. Earthworm produced in other province is called *tu di long*. It is slight salty in flavor, cold in nature, nontoxic and attributive to lung, spleen and liver meridians.

The actions are (1) clearing heat, stopping convulsion, (2) eliminating water, resolving toxin, (3) stopping asthma, dredging collaterals, (4) suppressing liver and reducing blood pressure. It can treat wind stroke, epilepsy, high fever due to warm factors, jaundice, throat obstruction, asthma, Bi syndrome, etc..

Scholars have done much research on ingredient and pharmacologic functions, inspiring us to mast its functions and applications further. The main functions are summarized as follows.

(1) Abating fever: *tian zhong* and *e tian*, two Japanese scholars (1915), find lumbrofibrine of *di long* can abate fever in animal experiment.

(2) Reducing blood pressure: doctor *Zhao Chenxia*, et al, consider hypoxanthine of *di long* can reduce blood pressure ① . Doctor *Huang Wenkui*, et al, extract the ingredient which can reduce blood pressure, and find seven kinds of ingredient besides hypoxanthine, among which parichaeta B1 is the most powerful ②.

(3) Stopping asthma: it is reported by doctor *Zhao Chenxia*, *Zhu Hengbi*, et al, that active ingredient can expand bronchus. Hu'nan medicine industry institute ④ extracts succinic acid, one of active ingredient for asthma which is confirmed by clinic that it can soothe breast, eliminate phlegm and stop asthma.

(4) Heat immersion liquid and its wine extraction have anticonvulsants actions.

Additionally, one of active ingredient extracted from *guang di long* can enhance the tensity of uterus and lead to spastic contraction, and so can excite intestine. It is reported by Japanese scholars that immersion liquid of *di long* can directly contract vessel, while its central action can expand vessel.

Clinical practice confirms that *di long* is effective to hemiplegia due to wind stroke. For example, *bu yang huan wu tang* which is good at treating hemiplegia uses *di long*. When the author treats longy high blood pressure

with wiry pulse due to hyperactivity of liver *yang* or the high blood pressure which do not be reduced obviously by other drugs in clinic, *guang di long* is added into the formula for suppressing liver and subduing *yang* to reduce blood pressure obviously and relieve the symptoms such as headache, insomnia and restlessness.

Di long can clear heat and resolve toxin, so it can be used for sunken and dark purple macula due to fire. It is also can be used for hematic macula which is accompanied with blood heat symptoms. Additionally, *di long* can promote the cicatrisation of ulcer, so it is also effective to chronic ulcer.

It is effective to high fever, delirium, restlessness, or even spasm and convulsion of febrile diseases, such as convulsion due to encephalitis B.

“*bie lu*” says that *di long* is good at treating big abdomen and jaundice. The author considers that *di long* can treat not only common jaundice due to damp-heat, but also acute jaundice (severe hepatitis, hepatodystrophy) due to invasion of pathogenic factors into pericardia and ascites with stomach excess manifesting as high fever, dry mouth, delirium, restlessness, unconsciousness, abdominal distention, constipation, yellow and thick coating, surging and rapid pulse, etc..

Because it can go into collaterals, it can be used for heat Bi syndrome with not too much weak body.

Di long can expand the smooth muscles of urine channel, stop bleeding due to urine system stone and promote the discharge of stone.

Di long can be made into oil form for external use. Several strips of live *di long* are washed, dipped into olive oil (1:3) for several days, wringed by gauze, filtered and lay aside. It can be used externally for gout, injury due to falls and beat, burn, scald, snake bite, local muscle spasm, ect.. It also can inhibit tuberculosis bacillus and common fungus which can cause skin diseases. It also can be used for chronic osteomyelitis, carbuncle, furuncle, traumatic infection, etc..

The dose is 9 to 15g for decoction, and 1 to 2 g for pills and powder. It is baked into blue color and removed from fire when it gives out extreme off-odor. It should be careful when *di long* is used for the patient with weak pulse and unformed stool. Pregnant women and weak patient are contraindications. The clinical applications are:

1) Asthma: there are many formulas for asthma whose main drug is *di long*. The main formulas are selected for reference.

(1) *di long gao*: it is cold (clearing heat) and salty (moistening and descending), so it is most suitable for heat asthma due to fire ascending. 100 to 200 strips of live *di long* are washed, decocted by water. After residue is removed, the decoction is made into *gao* with refined white sugar. One small soup spoon of *gao* is taken after it is mixed with boiled water every time, twice a day. It should be careful when it is used for patient with weak pulse. Or drugs for supplementing healthy *qi* and enhancing root are added for this kind of patients.

(2) Empirical formula of Professor *Jiang Chunhua*: *guang di long* 15g, *hai piao xiao* 9g, *tian zhu huang* 9. They are grinded into powder, 1.5g every time, three times a day. With the help of the formula for supplementing *qi*, enhancing root, moistening lung and eliminating phlegm, it is effective to asthma.

(3) 3 to 4.5g of *di long* and *gan cao* with same dose or 3g of *di long* and *ting li zi* with same dose is taken every time, three times a day. They can relieve the outbreak of asthma. The former formula is suitable for weak body, and the later one is suitable for lung *qi* excess.

(4) The formula of the fifth clinic of Shanghai socialized medicine: *guang di long* 60g, *zi he che* 60g and *sheng gan cao* 12g. *hai ge ke* 60g is added for heat type, *lu jiao* 30g for cold type, *chuan bei mu* 30g for too much sputum. They are grinded into powder and filled into capsules. 3g are taken every time, twice a day. Six months compose one course of treatment. The formula promotes body function and recovery of chronic asthma patient who suffers cough, asthma and difficulty to lie down. It is also effective to child asthma.

(5) 3031 injection: every 2ml injection contains 600mg of *guang di long* disodium succinate. It is used to control the outbreak of allergic asthma and asthma type of chronic bronchitis. Emergency department of Beijing *zhaoyang* hospital treats more than 30 cases of severe asthma by the injection. The outbreak and symptoms are relieved quickly with 83.3% of efficient rate.

[case] patient *Xia*, male, 39, worker. He had asthma history. Due to invasion of wind and heat, obstruction of phlegm and heat in lung resulting failure of lung to ascend and depurate, manifesting as asthma, dry mouth, yellow coating, and soggy and rapid pulse. The treatment methods were clearing heat, eliminating phlegm, descending adverse flow of *qi* and relieving asthma. *Di long* 90g and *ting li zi* 90g are grinded into powder, 3g every time, three times a day. The asthma was stopped and cough was relieved the next day, so he was asked to take herbs twice a day. The disease was relieved after three days. Later, *liu wei di huang wan* was taken, 9g every time, twice a day. The disease did not reoccur through one-year observation.

Comment: *Wuhan* biologic product institute and *Hubei* college of TCM consider that *di long* can expand bronchus, promote expectoration and excite pituitary-adrenal gland system, which further explains the pharmic mechanism of *di long* treating asthma.

2) High blood pressure: *di long* can clear heat, stop spasm and descend *qi*, so it is suitable for high blood pressure due to liver hyperactivity due to *yin* deficiency, wind-fire, or ascending of *qi* and blood. It can reduce blood pressure obviously, and relieve symptoms such as distention of head and eyes, restlessness, etc.. the therapeutic effect is quite stable.

[case] patient *Li*, male, 45, cadre. Due to overweight, hyperactivity of liver *yang*, and consumption of kidney *yin* and failure of lung to be nourished, wind comes up and fire ascends, manifesting as headache, or head distention,

tinnitus, blur eyesight, red and hot complexion, restlessness, weak waist and low limbs, dry mouth, constipation, red and purple tongue, wiry and strong pulse, and weak pulse in left *chi* location. Descending and stopping wind should be applied right away to relieve branch, and nourishing kidney and soothing liver were used to treat root. The blood pressure was 170/110 mmHg. The formula was *da sheng di* 18g, *sheng shi xie* 18g, *zi be chi* 18g, *zhi shou wu* 18g, *chuan shi hu* 12g, *sheng bai shao* 12g, *sang shen zi* 12g, *guang di long* 12g, *zhi gui ban* 30g, *sheng mai ya* 30g, *gan cao* 2.5g. The second visit: after taking drugs for four doses, the symptoms were relieved, the spirit and sleep was good. The tongue was slight pale, and the pulse was wiry but more general than before. The blood pressure was 146/88mmHg. Since the former method had received therapeutic effect, it was still applied. The third visit: after taking drugs for another four doses, the condition was good and the blood pressure was normal. So *gao fang* was prescribed for regulation.

3) Convulsion due to high fever: *di long* can be added into the formula which is made according to syndrome differentiation to eliminate heat and stop convulsion for convulsion, spasm and delirium due to high fever in febrile diseases. The therapeutic effect is special good for pediatric diseases. Weak pulse and unformed stool are contraindication. As for continuous high fever and severe syncope in encephalitis B and epidemic cerebrospinal meningitis, five or six strips of fresh *di long* are washed and pounded with *zhao fan* 2g. They are used to cover fontanel (hair are cut away.). Another application can be used if the fever does not be abated after five hours. The author uses this method as assistant treatment for high fever and syncope of encephalitis B for many times, receiving good effect. Additionally, it is also effective to infantile high fever that 120g of red *qiu yin* are pounded with brown sugar and then used to cover navel.

4) Mania: *di long* can be used alone or with drugs for suppressing liver and descending fire for mania with strong constitution.

[case] patient *Yuan*, male, 21, student. Emotion depression generated fire, and extreme fire generated phlegm and wind which confused clear orifice, resulting in disturbance of consciousness, howling, attacking people, breaking clothes. No drugs took effect. The manifestations were red complexion and eyes, frequent close and open of eyes, wiry, slippery and strong pulse, yellow and rough coating, red edge and tip of tongue. It was mania. Reducing liver, descending fire, stopping wind and eliminating phlegm were applied. Ten strips of fresh *di long* were washed and then cut with 50g to 100g of pork everyday. They were mixed with salty and shallot and used as stuffing of pastry. The mania was relieved a lot after four days, and stopped after ten days. The disease was cured after one month. It was ten years until now that there was no reoccurrence.

Laiyang funny farm of Yantai city uses *qiu yin* syrup to treat 50 cases of psychosis with 14 cases of cure, 6 cases of obvious improvement, 9 cases of improvement, and 21 cases of no avail. The method is that every 500g of

washed *qiu yin* are mixed with 150g of sugar in order to let them dissolve by themselves. The solution is filtered 24 hours later, and the rest *qiu yin* is washed by cold boiled water and filtered for several times. All the solution are put together and filtered by gauze for 3 to 5 times. 1000ml of syrup are made from 500g of *qiu yin*, and then put into refrigerator or gloomy and cold place. Preservative can be added in summer. 100ml is taken every time, once or twice a day. They consider that the drug has certain anticonvulsants action, and is effective to inordinate excitement of schizophrenia and somatopsychosis, but can not inhibit the excitement and restlessness right away.

5) Ulcer: *di long* is effective to heat type of peptic ulcer. It should be selected according to syndrome differentiation principle, or other wise, bad result would happen if it is used for deficient cold type.

Method: 1000g of fresh *di long* are put into water for about two hours until the earth and stool are discharged out the body. They are picked out, washed, put into dish and mixed with 500g of refined white sugar. The body fluid of *di long* would seep out. After one to two hours, the solution can be filtered by gauze. When there is no liquid dropping from gauze, a little water is added to rinse the residue until there are 700ml to 1000ml of solution. The solution is sterilized by pressure cooker and then put into cold place or refrigerator.

Direction: 30ml to 40ml of solution is taken before the meal when it is warmed, three times to four times a day. The patient should lie down towards the ill side for about one hour after taking drug, so as to let the drug take better local effect. Usually the drug should be taken for one to two months. The solution is sweet and has no special odor, so the patient likes to take it. The therapeutic effect has been validated by many doctors, and the author also finds that the therapeutic effect always comes when he uses it. It is most suitable for stomach heat due to *yin* deficiency, and active stage of ulcer developing into hemorrhage.

[case] patient *Lu*, male, 43, cadre. He suffered gastric pain for eight years. The pain was induced by cold and over-work. He had acid regurgitation, nausea and epigastric upset which were severer three hours after meal. He once had bloody stool. Barium meal revealed there was a 0.4*1.1cm niche in duodenal ampulla, so he was diagnosed as duodenal ulcer. The occult blood was ++. The coating was slight yellow and greasy, no coating in middle of tongue, the tongue was red, and the pulse was thin and wiry. These were the symptoms of stomach heat due to *yin* deficiency, so *di long* solution was prescribed. 30ml of the drug was taken one hour before meal. The symptoms were improved after one week. The weight increased and the spirit was good after three weeks. Call-back after three months showed no niche.

6) Mumps: this disease is common seen in children. The manifestations are aversion to cold, fever, swelling and pain cheek. *Di long bai tang jin chu ye* (Sugar lixivium of *di long*) can be used for external treatment. The fever usually is abated within one to two days, and the swelling is eliminated within

one to three days.

Method: after the earth of ten strips of fresh *di long* is removed (do not wash them by water, in order to avoid the reduced therapeutic effect because of the loss of mucous in their body), they are put into glass and then mixed with the some dose of refined white sugar. After half to one hour, they become mushy and gray brown *di long bai tang jin chu ye*. They are put into glass bottle and then put in cold place or refrigerator with 2°C to 8°C (the time of storage should be less than two weeks.)

Direction: after the focus is washed by physiological saline, *di long bai tang jin chu ye* is dipped by gauze and then cover the focus, changed every three to four hours. Zhifeng health center of Jiande county, Zhejiang province, uses this method to treat 120 cases of mumps. The mild case is cured after one day, and severe case is cured after three days. It proves its quick effect. When the author was working at village, he often asked the parents of ill children to use this method, receiving good effect.

7) Ulcer in low limbs: after the focus is washed, the *di long* lixivium is dipped by gauze and cover the focus, three times a day. Granulation becomes red and moist, and the ulcer becomes smaller and smaller and then coalesce. The process of making *di long* lixivium is the same to *di long bai tang jin chu ye*.

8) *Bai hu li jie* (Bi syndrome): *di long*'s nature is wandering, and is good at dredging collaterals and treating obstruction, so doctor *Li Shizhen* considers it is expert in treating *li jie feng tong*. Doctor *Zhu Danxi* considers it can resolve heat toxin powerfully because of its cold nature. There are many formulas for obstruction pain, such as *di long san* of "*sheng hui fang*", *xun luo san* of "*qi xiao liang fang*", *zhuo hu dan* of "*zheng zhi zhun sheng*", *she xiang yuan* of "*ben she fang*", etc.. *Di long* is a requisite drug for *bai hu li jie* with severe pain. The author always uses doctor *Xu Shuwei*'s *she xiang yuan* to treat obstinate and severe pain of rheumatic arthritis, rheumatoid arthritis, sciatica, etc.. The formula is *sheng chuan wu* 3, *sheng quan xie* 21, *sheng hei dou* 21, *guang di long* 15. They are grinded into powder, added with *she xiang* 0.5g, made into pills with glutinous rice congee as large as mung bean. Seven pills, or even ten pills, are taken with warm wine (water is also OK) before asleep. The drug takes effect when the patient has slight sweat.

[case] patient *Yi*, female, 54, farmer. She suffered rheumatic arthritis for more than fifteen years. The disease was mild sometimes, and severe sometimes. The disease aggravated these years, the joints became rigid and swelling and had movement disorder, and she could not sleep well. She took hormone and anti-rheumatic drugs to relieve pain. Antistreptolysin O (ASO) was 833 unite, and ESR was 40mm. The coating was white and greasy, and the pulse was thin and rough. This was obstinate obstruction due to invasion of cold and dampness into meridians and collaterals. *She xiang yuan* was prescribed, 7 pills every time, twice a day. The pain was relieved a little after taking drugs, and was stopped after taking drugs for one week. The drugs for

warming meridians, dredging collaterals, supplementing kidney and nourishing blood were prescribed for her to enhance the therapeutic effect. After one month, call-back revealed that ASO and ESR were normal. There was no reoccurrence in one year.

9) Bone fracture: He'nan orthopaedics hospital introduces that *di long* can stop pain, eliminate swelling, promote growth of bony callus and accelerate healing for bone fracture. The pain usually is stopped after using drugs for one hour, and the swelling is eliminated after 24 hours. The shortest time for early bony callus formation is 17 days, and the longest time is 62 days, and the average time is 38.7 days. There are three formulas. The first one is *di long jiang*: decades of fresh *di long* is washed, pounded, mixed with refined white sugar or *bing pian* and used to cover the focus. The second one is *di long san*: *guang di long* 300g and *bing pian* 48g are mixed with refined white sugar (drugs : sugar=3:1) and proper dose of vaseline. They are made into paste and then used to cover focus, once a day. The third one is *di long jie gu wan*: *guang di long* are grinded into powder and made into pills with water as large as phoenix tree seeds. *Shan yao* is made for its shell. 6g is taken every time, twice a day.

10) Injuries due to falls and trauma: fresh *di long* is washed, baked and grinded into powder. 6g of the powder is taken with Shaoxing wine once or twice a day for injuries due to falls and trauma and pain due to stasis. It can stop pain, eliminate swelling, disperse stasis and soothe collaterals.

11) Urticaria: decoction of *guang di long* 9g and *gan cao* 9g can be taken for stagnation heat in *ying* and blood, one dose a day. The drugs take effect after two to three days. As for obstinate urticaria, 100% *di long* injection ⑤ can be used as intramuscular injection, 2ml every time, once a day. Ten times composes one course of treatment. Two course of treatment must be three to five days apart. The drug takes effect usually after used by five to eight times. The disease usually is cured by one to two courses with 84% of effectiveness rate.

12) Sequelae of stroke: the manifestations of sequelae of stroke are hemiplegia, dysphasia, mouth and eye distortion, saliva in mouth angle, etc.. It usually is due to *qi* deficiency, blood stasis, and obstruction of collaterals according to TCM syndrome differentiation. Doctor *Wang Qingren* uses *bu yang huan wu tang* to tonify *qi*, activate blood, disperse stasis and dredge collaterals to promote the recovery. The drugs are coincident to the pathogenic mechanism. The formula is *huang qi* (the original dose is four *liang*, but five *qian* to one *liang* is often used, that is 15g to 30g.), *di long* 6g, *dang gui wei* 6g, *chuan xiong* 6g, *chi shao* 9g, *tao ren* 9g, *hong hua* 4.5g, decoction, one dose a day. *Zhi quan xie* and *jiang can* are added for mouth and eye distortion; *shi chang pu* and *nv zhen zi* for dysphasia; *sang ji sheng*, *zhi shou wu* and *zhi wu xiao she* for debility of limbs; large dose of *di long* for high blood pressure, and *zi bei chi* and *huai niu xi* can be selected. Or *di long*, *wu gong*, *shui zhi* and *chuan xiong* with same dose are grinded into powder

and filled into capsules, four capsules every time, three times a day, effective to sequelae of stroke.

[case] patient *Ren*, male, 59, worker. He was overweight, addicted to wine, and suffered high blood pressure. He often felt head distention and limbs numbness. Two days ago, he suddenly felt headache, red face, and then had syncope, vomiting saliva, uncontrol of urine and right limbs paralysis after meal. The consciousness became normal and the blood pressure was reduced into 160/90mmHg from 196/110mmHg by rescue. However, he still had dysphasia, hemiplegia, thin and greasy coating, petechia in the edge of tongue, slight wiry pulse. *Bu yang huan wu tang* (the dose of *huang qi* is 15g, *di long* 12g.) added with *shi chang pu* 12g, *nv zhen zi* 30 was prescribed. After taking five doses, he felt good, speech was better and the limbs were agiler. After taking drugs for more than 30 doses, all symptoms were improved, he can walk by stick, and the blood pressure was normal. Myodynamia of right hand was still low than normal.

13) Infantile paralysis: the disease belongs to warm disease, similar to *ruan jiao wen* and *wei yi*. Different doctors have different opinions on syndrome differentiation, but there are two stages. The first is early stage of paralysis, that is, progressive stage. The treatment methods are clearing heat, eliminating dampness, soothing tendons and activating collaterals. *Di long* 6g, *chi shao* 6g, *dang gui* 9g, *mu gua* 9g, *niu xi* 9g, *huang qin* 9g, *jiang can* 9g, *tao ren* 3g, *hong hua* 3g and *chuan duan* 7.5 can be used. *Dang shen* and *huang qin* are added for weak low limbs; *long gu* and *mu li* for much sweat. The second stage is flaccid paralysis and sequelae. On the basis of resolving residual pathogenic factors, other methods are added, such as supplementing *qi*, nourishing *yin*, strengthening liver and kidney, soothing tendons, dredging collaterals. The drugs such as *zhi huang qi* 15g, *dang gui* 6g, *xian ling pi* 6g, *chi shao* 6g, *di long* 4.5g, *chuan xiong* 4.5g, *tao ren* 4.5g, *wu xiao she* 4.5g are used. *Di long* is always suitable for this disease, because it can not only clear heat and resolve toxin, and also dredge collaterals and soothe tendons.

14) Contraception: *di long* 120g, *lu xian cao* 90g, *zi cao* 90g and *huang bai* 60g are separated into nine parcels. One parcel is taken everyday after menstruation. The formula is effective to part cases. Because the nature of this formula is cold, it is suitable for the patient with exuberant *qi* and blood without cold deficiency of spleen and stomach.

15) Eczema: dermatological department of the Chinese People's Liberation Army 173 army affiliated hospital uses *di long* injection for acupoint injection to treat eczema®. Their experience is worthy popularizing. (1) Recrudescence eczema: main acupoints are *hua tuo jia ji* and T6,7,8 (both sides). Other acupoints are selected according to the focus. For example, *he gu*, *qu chi* and *chi ze* are selected for upper limbs; *xue hai*, *wei zhong*, *san yin jiao*, *cheng shan* and *zu san li* are selected for lower limbs. (2) Facial seborrheic eczema: root segment of earlobe is selected for injection. (3) Scrotum eczema: *chang qiang xue* is selected. (4) Local eczema: local block therapy is applied.

Treatment methods: 5ml of 100% *di long* injection is used for one acupoint. The dose for local block therapy depends on the size of focus, but less than 2ml. the injection is applied every three days, and 10 times compose one course of treatment. No other drugs are applied for all the cases. Results: 35 cases are treated by one course, among which 14 cases are cured, 13 cases receive obvious effect, 5 cases are improved and 3 cases are invalid. The current therapeutic effect of *chang qiang* acupoint injection for scrotum eczema is the best, but the therapeutic effect is not obvious for recrudescence eczema. The itch usually is relieved by one injection. This therapeutic effect can last 36 to 48 hours at most, and 24 hours at least. Three-month follow-up shows no reoccurrence. The weak point is that the injection is pain.

16) Aptotic erythema type of drug eruption: doctor *Zhang Weisheng* use *di long* solution to treat aptotic erythema type of drug eruption^⑦, especially for herpes ulcer in lip and external genital organs. The therapeutic effect is quite good. Method: when the focus is washed, *di long* solution (produced by Guangzhou fifth pharmaceutical factory) is dipped by sterilized gauze and used to cover the focus. The solution is dropped to keep gauze moist. The gauze is changed once a day until it is cured. *Di long bai tang jin ye* is also good. 100 strips of fresh *di long* are mixed with 50g of refined white sugar. They are kept static for two hours, and then *di long* is removed. *Di long bai tang jin ye* is used following the method mentioned above. Since 1974, 15 cases have been treated by this method, among which focus of 11 cases is prepuce, 2 cases is lip, and 2 cases is right elbow. They are cured after using the drug for two to four times.

[case] patient *Zhu*, male, 22, worker. After taking 1g of sulfadiazine because of tonsillitis, he felt penis itch gradually, and then there was erythema and blister which is infected and festered after damage by clawing. It was painful. The disease became severe when he wrongly uses ointment. When he visited me, it was diagnosed as aptotic erythema type of drug eruption. The method mentioned above was applied and it was cured after three days.

17) Early stage of paralysis due to spinal trauma: the condition of paralysis due to spinal trauma is quite complex, there are incomplete transection and complete transection. Especially, the latter one is a sticky problem. If there are indications for surgery in the early stage, the surgery must be operated as early as possible. TCM treatment should depend on syndrome differentiation. For example, activating blood, dispersing stasis, dredging *du* meridian, and promoting reunion of tendon and fractured bone are applied for paralysis due to bone fracture; supplementing kidney, strengthening spleen, warming meridians, and dredging collaterals are applied for flaccid paralysis; nourishing liver and kidney, dredging meridians and collaterals are applied for spasm paralysis, etc.. Acupuncture, moxibustion, acupoint injection and function exercise are applied at the same time.

Paraplegia medical group of Beijing TCM hospital introduces a formula for early stage of paraplegia, suitable for spinal trauma within three months, loss

of sensation and movement under the injured level, uncontrol of urine and stool and pain focus. The formula is *di long* 6g, *gu sui bu* 6g, *zi ran tong* 6g, *jin gou ji* 6g, *hong hua* 6g, *tao ren* 6g, *dang gui* 6g, *dan shen* 6g, *di bie chong* 6g, *zhi ru xiang* 6g, *zhi mo yao* 6g, *san qi* powder (taking after mixing with decoction) 6g, decoction. *Ren shen*9g, *mai dong* 9g and *wu wei zi* 9g are added, and *zi ran tong* and *tao ren* are removed for weak body and *qi* deficiency; *ge gen* 15g for neck trauma; *yuan hu* 9 for severe pain; *sha ren* 5g and *jiao shen qu* 12g for poor appetite; *yu li ren* 30g and *huo ma ren* 30g are added, and *gu sui bu* , *zhi ru xiang* and *zhi mo yao* are removed for constipation.

The author participated into the work of treating paraplegia for patients from Tangshan earthquake area in autumn of 1976. The drugs for warming *du* meridian and kidney such as *wu xiao she*, *feng fang*, *xian ling pi*, etc., are used for flaccid paralysis; drugs for expelling wind and stopping spasm such as *di long*, *quan xie*, *wu gong* (grinded into powder and taken with decoction), etc., are used for spasm paralysis. *Long ma qi fei pian* is made in order to take conveniently. The formula is *zhi ma qian zi* 0.06g, *wu xiao she* 1g, *lu jiao pian* 0.4g, *zhi di bie chong* 1g, *di long* 1.5g, *feng fang* 1.5g. Every tablet weights 0.3g. The dose in the formula is for one day, and taken by three times. It can supplement kidney, tonify *du* meridian and improve paralysis. It has certain therapeutic effect.

18) Eryspelas: five doses of fresh *di long* and one dose of refined white sugar are mixed with proper dose of cool boiled water. When they dissolve into paste, they are used to cover the focus, three times a day. It is usually cured after two to three days.

19) Pain due to vessel embolism: such as thromboangitis obliterans. Live *di long* is pounded with a little refined white sugar, and then used to cover focus. The pain would be relieved gradually.

20) Prospermia: ten strips of *di long* are cut open and washed. They are pounded with tuber onion juice. The drugs are taken with hot wine, once a day. It would take effect for not deficiency patient after taken for several days.

21) Urine system stone: small red *qiu yin*, garlic and leaves of sweet potato with proper dose are pounded. They are used to cover navel, once a day. It can promote the discharge of stone.

22) Infantile thrush: two strips of washed *qiu yin* are mixed with proper dose of refined white sugar. After a moment, there is liquid. The liquid is dipped by cotton swab to cover the focus, twice or three times a day. The therapeutic effect is quite quick.

[case] patient *Chen*, eight months, male. Because of thrush, he cried when he sucked. After using the drug once, he sucked as normal. He was cured after using the drug twice.

23) Trachoma: several strips of *qiu yin* with white neck are put into cool boiled water and washed again and again. Then they are put into glass and added with 10% sodium chloride. The body fluid of *qiu yin* would seep out.

After half hour, *qiu yin* is removed, and the solution is filtered. The solution is put into warm water with 60°C to be warmed intermittently, 30 min every times, three to four times. After being cooled, they are put into cold place or refrigerator for storage. The solution is used to drip eyes twice or three times a day. The average time for cure is 10.4 days.

24) Sick sinus syndrome: it is effective that *di long* and *lu jiao* powder are added into the formula which is made according to syndrome differentiation.

① Chinese Physiology Journal 12(2):147. 1937

② Ganshu Province High Blood Pressure Research Date Compile first edition, Ganshe province health office, 1961

③ Chinese Medical Journal 23:531. 1937

④ component of *guang di long* for relieving asthma. Chinese Medical Journal 1:68. 1975

⑤ *Li Zhengji*: *di long* injection treating 100 cases of chronic urticaria. New Medicine 4:178. 1976

⑥ acupoint injection of *di long* solution treating eczema, Chinese Medical Journal 4:245.1974

⑦ external use of *di long* solution for aptotic erythema type of drug eruption, New Medicine 7:3.

1976

12 Yan You (subsidiary drug: wo niu)

Yan you is limax, its popular name is *bi ti chong*. It is common seen in gloomy and damp place. It is salty in flavor, cold in nature, nontoxic and attributive to lung, liver and large intestine meridians.

The functions are (1) clearing heat, resolving toxin, (2) eliminating swelling, stopping asthma,(3) dispersing stasis, dredging meridian,(4)softening hardness and treating hernia. It can be used for mouth and eye distortion due to wind stroke, tendon spasm, convulsion, throat swelling, asthma, prolapse of the anus, hernia, and other diseases such as carbuncle.

"*ben cao jing su*" considers *yan you* can treat mouth and eye distortion and tendon spasm due to invasion of wind into meridians and collaterals. Clinic application confirms that it often takes effect when it is pounded and used to cover the focus. Doctor *Li Shizhen* considers it is good at treating burning hot due to swelling toxin and swelling pain due to heat ulcer. Clinic application confirms that external use of *yan you* is effective to throat swelling and ulcer, carbuncle, furuncle, pain due to hemorrhoids, bite by toxic insect, etc.. Because its salty flavor and coldness can clear heat, it is also effective to prolapse of anus due to intestine heat. From the statement that *yan you's* salty and cold nature can soften hardness and soothe tendon ("*ben cao jing su*"), the author tries it to treat the spasm and pain due to hernia, receiving therapeutic effect. No herbal books record relieving-asthma function of *yan you*, but folk in the south of Changjiang River often uses it. *Yan you* and *xiang bei mu* are made into pills, named *yu yan dan*. It is effective to many kinds of asthma.

Doctor *Ye Tianshi* likes to use *yan you*, there are many cases in “*ling zheng zhi nan yi an*”.

It is traditionally said that too much intake of *yan you* would result in impotence. However, the author once treated an asthma patient. He increased the dose by himself, and took 140 to 180 strips of *yan you* everyday for two weeks. There was no other side effect except chest distention sometimes.

Yan you usually is used for external use, but also suitable for oral administration. It should be careful if it is used for cold deficiency. The clinical applications are discussed as follows.

1) Asthma: *yu yan dan*, a folk formula, is suitable for heat type and excess type of asthma. 100 strips of *yan you* is washed by cool boiled water, pounded with proper dose of *xiang bei*, and then made into pills as large as mung bean, 1.5g every time, twice a day. They are taken with water. Doctor *Jiang Chunhua* says ①, the recurrent effect of *yu yan dan* is not obvious, but the long-dated effect is very good;*yu yan dan* can be used alone in catabasis to reduce the further outbreak, even to cure it. According to our experience, *yu yan dan* is helpful for all kinds of asthma (except failure of kidney to receive *qi* type). For majority of cases, the asthma is relieved, expectation is smooth, and symptoms are improved after taking drugs. Continuous administration, assisted by the drugs for enhancing the root, can cure the disease gradually.

Doctor *Chen Qianjian* ② also uses *yan you* to treat asthma. Method: (1) capsules: washed *yan you* is baked on the tile, grinded into powder and proper dose of *bo he* is added for antiseptis. Every capsule weights 0.2g to 0.4g. 0.4g is taken every time, three times a day before meal. When the symptoms are relieved, the dose is reduced until it can stop asthma. (2) mucus preparation: 10 to 15 strips of washed *yan you* is mixed with refined white sugar or salty to make them dissolve into mucus. It is taken before sleep. After taken for ten times, the dose is reduced until it can stop asthma. Doctor *Chen Qianjian* points out that oral administration of *yan you* can relieve the spasm of bronchus, make respiratory tract smooth and help discharge of much secretion. All the patients who take *yan you* say that the amount of phlegm increases and there is oppression sensation in the throat after taking drugs, but the amount of phlegm decreases, the oppression sensation disappears and asthma is stopped after several days. The therapeutic effect of *yan you* for oral administration is obvious than common drugs (neither injection nor oral administration), and the effect last longer. There is no side effect.

[case] patient *Pan*, male, 52, soldier. He suffered chronic bronchitis, asthma and pulmonary emphysema for several years. The diseases became severer day by day. He could report for only half hour. He had to take hormone and aminophylline for intravenous injection to continue his report, or otherwise, he had rapid breath and could not give speech continuously. He took many herbs and western medicine without being cured thoroughly, and the condition could

be relieved for a moment. He visited me and asked for curative treatment. Because his constituent was good, the sleep and diet were normal, the coating was thin and yellow, the tongue was red and the pulse was slight wiry, *yan you tang jiang* was prescribed directly. *Yan you* was caught by medical officer. After they were washed, 20 strips of *yan you* were dissolved into syrup by 100g of refined white sugar. They were taken in first day. 10 strips were added everyday until 60 strips. After taking drug for three weeks, the drug stopped to be taken for ten days. Then, it was continue to be taken from small dose. Because medical officer caught much *yan you*, 100 strips was made into syrup and stored in refrigerator. The patient was asked to taken drug following the method mentioned above. But the patient drunk half syrup (50 strips) at first day, and drunk another half at second day, because of the sweet taste. He felt good and the expectoration was smooth. He asked to medical officer to add 20 strips every day, and the condition was good. When the dose increased to 180 strips, he felt chest oppression. He called the author for treatment. No one once took so large dose. So the author asked the medical officer to pay attention to blood pressure and heart rhythm. There was no change, and he was asked to stop taking drug. After one week, he took drug for one course following the method. From then on, he felt good although over-work, coldness and giving report for three hours. Such large dose and obvious therapeutic effect were created by the patient by breaking the routine. Usually proper dose is 10 to 60 strips a day.

2) Diphtheria and throat carbuncle: *han you san* has functions of clearing heat and resolving toxin. If diphtheria and throat carbuncle with rot and white membrane are treated by *han you san*, the rot would removed, and the effect is quick. The formula is that proper dose of *yan you* and 30g of *han shui shi* powder are pounded together, insolated into dryness, grinded into powder, and added with 3g of *fei qing dai*. They are stirred into good distribution. The drugs are used for laryngeal insufflation, four or five times a day. External use for the *han you san* can also remove rot and generate granulation for carbuncle and furuncle whose rot is difficulty to drop.

3) Lymph node enlargement: 7 or 8 strips of *yan you* and 3 or 4 red copper coins (it is difficult to find red copper coins now. Maybe red sheet copper can be used, but we have not tried.) are pounded into earth form. They can soften hardness and eliminate node, are used to cover the focus. It can eliminate enlarged Lymph node which has longy duration and has not been suppurated. The author tried it to treat some cases, and it is effective indeed.

4) Ulcer in lower limbs: ten strips of *yan yu* baked, grinded and mixed with rape oil. It is used to cover the focus. It is quite effective to ulcer in lower limbs which is stinking.

5) Swelling and pain of hernia: the pain of external hernia would be relieved quickly and the swelling would be relieved gradually by external use of 4 or 5 strips of pounded *yan you*. If the swelling is not relieved thoroughly, it can continue to be used. Additionally, *dian zhi yao yan fang*: large *yan you* 3, *jin*

yin hua 3g, mi tuo seng 3g, huang dan 3g, fei xiong huang 3g, duan ru xiang 3g, duan mo yao 3g and *duan long du 3g*. They are grinded into powder, mixed with water and then used to cover the focus. It can make hernia smaller gradually. Usually, hernia is cured by several uses of the drugs, suitable for both internal and external hernia.

6) Carbuncle: the folk uses pounded *yan you* to cover the focus. Or *yan you* is dissolved in salty water and then used to cover the focus.

7) Furuncle ; one or two strips of *yan you* and 6g of *ming fan* are pounded, and then used to cover the focus, twice a day.

8) Infantile convulsion: one strip of *yan you* and a little dose of refined white sugar are pounded and then used to cover infantile fontanel, assisted by pricking *si feng* acupoint. It is reported that this method is used to treat two cases and both are cured.

9) Sterilization: 5 to 6 strips of *yan you* are washed by cool boiled water and mixed with a little dose of salty. They are dissolved and changed into liquid which is used to braise one chicken egg. It is taken two days after menstruation, once a day, for three days. The drug is taken for three months, and contraception method is also applied in the half year. The mechanism for sterilization perhaps is that it is salty and cold resulting in dysfunction of *chong* and *ren* meridians. One who offers the formula took the drug when she was 28 and has no baby. Now she is 60. Because the case is few and it has not been validated by clinic, it is introduced to you to refer and study further.

10) Tonsillitis: *yan you 2, wu mei 3*, decoction. Mild case can be cured by one dose.

Subsidiary Drug: *Wo Niu*

Wo niu is whole body of *Eulota simiiaris* Ferussac. The functions of *wo niu* is similar to that of *yan you*. It is salty in flavor, cold in nature, is good at clearing heat, eliminating swelling and resolving toxin. It can treat 1) swelling and pain of hemorrhoids, prolapse of anus: *wo niu* is baked on the tile, grinded into powder, and mixed with tea-seed oil to cover the focus. 2) cervical scrofula or tumor. 3) mumps: it is pounded to cover the focus. 4) contraception: 7 strips of *wo niu* are made into dry powder. They are taken after the menstruation by one to two times. It can control conception for one year. 183 cases have tried this method, among which 102 cases are observed for three months and 7 cases are failed. This method is easy, only would result in mild abdominal discomfort and irregular menstruation. 5) rotten feet: a little dose of *bing pian* is put into the shell of one *wo niu*. The *wo niu* is grinded with water and then used to cover the focus. 6) encephalitis B: encephalitis B with excessive syndrome, heat syndrome, spasm, much phlegm and constipation can be treated by *ba niu wan* on the base of other drugs according to syndrome differentiation. *Ba dou shuang 9g, wo niu 30* (baked, grinded into powder), *ru xiang 6g, nan xing 6g, fei xiong huang 3g* are made into pills as large as soybean with honey. *Zhu sha* is used as shell. The dose increases day by day (from one pill) until diarrhea comes up, but the

largest dose is less than 7 pills.

Comment: *di long* and *yan you* are both salty and cold, can clear heat, resolve toxin, eliminate swelling, stop pain, and relieve asthma and cough. However, there are some differences. *Di long* is good at suppressing liver, descending *yang*, stopping convulsion, and eliminating obstruction. *Yan you* is expert in hemorrhoids, hernia, bite by toxic insect. They should be selected according to real condition in order to make use of them.

① observation on clinical effect of *yu yan dan* treating 64 cases of asthma, Shanghai TCM Journal 3:10. 1959.

② primary summarization of *yan you* treating asthma, Medicine and Health Technique Date Compilation, Nanchang City.

13 *bai hua she* *wu shao she* (subsidiary drugs: *fu she*, *she tui*)

It is said that there are nearly 3000 kinds of snakes in the world, among which 600 kinds are poisonous snakes. There are nearly 170 kinds in China, among which 46 kinds are poisonous snakes. The sample survey of some much-snake areas of Zhengjiang and Anwei provinces reveals that annual incidence rate of snake bite is 0.5% to 3.5%. The incidence rate of snake bite in the Southeast Asian nations is 3%. It is reported by WTO, on the basis of incomplete statistic about world-wide snake bite, that 30 to 40 thousand people died from snake bite every year. Therefore, poisonous snake is quite harmful to human. But the therapeutic effect of snake on treating and preventing disease is obvious and worthy studying.

Bai hua she is *AhKistrodon acutus*, and one which is produced in Qizhou of Hubei province is called *qi she*. *Jin qian bai hua she* is dried body of young *Bungarus Multicinctus* Blyth. Both of them are sweet and salty in flavor, warm in nature, and toxic. *Wu xiao she* is *Zaocys dhumnades*, is sweet in flavor, mild in nature, and nontoxic. All of them are attributive to liver and spleen meridians.

The functions of snake are: 1) researching wind, dredging collaterals, 2) attacking toxin and stopping convulsion. They can go out to skin, and go into meridians and collaterals. The function of researching wind is the most powerful. The severe and obstinate diseases due to obstruction of toxic wind in blood phase, such as obstinate obstruction, limbs numbness, tendons spasm, hemiplegia, mouth and eyes distortion, convulsion, tic, itch of urticaria, tetanus, etc., are often treated by snake as main drug. Therefore, snake is considered as an important drug for expelling wind. "*kai bao ben cao*" says snake can treat weak lower limbs which is unable to stand for long time. It is validated by clinic that snake is effective to paralysis or flaccid paralysis, sequelae of encephalitis B, poliomyelitis, etc..

It is reported that snake not only has expelling-wind and anticonvulsants actions, but also promotes the generation of phosphorus which can nourishes nerves, resulting in relieving spasm, tic, numbness due to nervous system diseases and promoting the recovery of disordered nerves. Additionally, snake can promote the generation and release of adrenocorticotrophic hormone,

increasing the blood concentration and achieving the anti-inflammatory, repercussive and analgesic aims. It does not have the side effect like hormones. Especially, the therapeutic effect of poisonous snake is more powerful. Snake also can enhance the body immunity, change the relationship of antigen and antibody, prevent further damage of tissues and cells, make conditions of acute diseases steady and accelerate recovery ①.

Snake venom of long-nosed pit viper mainly is hemocirculatory-toxin, and bungarotoxin mainly is neurotoxin. Both of them contain protein, fat, saponin, etc.. Poison gland in head of long-nosed pit viper contains much sanguineous toxin (hemorrhagic toxin and hemolytic toxin), therefore, large amount of hemolysis and hemorrhage, even organ extensive hemorrhage would come up if one is bite. It is confirmed by experiments that it can reduce blood pressure through expanding vessels directly. The extraction has anticonvulsants, hypnotic, and analgesic actions. Bungarotoxin is quite fierce, and can inhibit respiratory muscles and nervous system, respiratory center in particularity. Therefore, it can cause respiratory paralysis. It is known that snake venom contains 30 to 40 kinds of protein and the function changes because of different component. Therefore, researchers can extract substances to attack cancer cells but not damaging health cells from 75 kinds of venom from rattlesnake to cobra. Elementary successes have been achieved that the snake venom can make cancer atrophy in the animal experiments. These pharmacologic and chemical studies show light to clinical applications.

The functions of *qi she* are most powerful, and functions of snakes produced in other place are less powerful. *Wu shao she* has mild nature and less powerful functions, but the price is only one twelfth of *bai hua she*. Therefore, severe and obstinate cases should be treated by former one, and mild cases can be treated by later one. Snake is warm and dry in nature, so snake should be assisted by other drugs of nourishing blood for wind transformed for blood deficiency.

The dose usually is 6 to 8g for decoction, and 1 to 2g for powder. The clinical applications are:

1) Rheumatoid arthritis: *ba yi* healthy center of *jiao qiao* community uses *long she san* ② to treat rheumatoid arthritis receiving very good effect. The formula is *bai hua she 30g, di long 30g* (the therapeutic effect is better if they are added with *di bie chong, wu gong, jiang can*.). They are grinded into powder and put into four parcels. One parcel is taken by two times in one day. Severe cases should be treated by one parcel every time, twice a day.

Long she san has been used for long time. Doctor *Li Shizhen* says that it can treat such diseases as weak limbs, mouth and eyes distortion, dysphasia, tendon spasm, obstinate obstruction of muscles, joint pain, obstinate ulcer, scabies, etc.. *Ba yi* healthy center modifies this formula to treat rheumatoid arthritis.

[case] patient *Fu*, female, 22. After miscarriage in April of 1970, he began to

suffered joint numbness, night sweating, low fever, then symmetrical swelling of fingers, wrists, elbows, toes, angles and knee. She received drugs according to symptoms and hormone for long time, but without unobvious therapeutic effect. She lied down on the bed, could not walk and needed nursing. PE: pale complexion, extreme thin and fatigue, low spirit, swelling fingers, wrists, elbows, toes, angles and knee, thick tissue, muscle atrophy, and spindle-shaped joints. RBC was 2,100,000, and haemochrome was 6g. She was diagnosed as rheumatoid arthritis (terminal stage). She began to take *long she san* twice a day, two parcels everyday, from 17th, July, 1971. The joint pain was relieved and swelling was eliminated after 8 days, and she could walk supported by other arms after the next seven days. After one month, she began to walk normally, the thick tissue became thin, atrophied muscle began to recover. She began to walk, and play *tai ji* in the morning. Because the disease was longy and her constitution was extreme bad, *gui pi tang* was added and *long she san* was reduced by half. After more than two months, symptoms of joints disappeared and atrophied muscles became normal. She could walk for more than 10 km, RBC was increased to 4,000,000 and haemochrome was 11g. She was nearly cured.

Comment: the dose for this case is large, so the therapeutic effect is obvious. It is worthy referring. Drugs for nourishing *yin* should be added for patient who has symptoms of *yin* deficiency.

2) Herpes zoster: it is also called *she dan* and *chan yao huo dan*. It common occurred on back, chest, waist and abdomen. The pain is quite fierce. It usually is caused by toxin stagnation in liver meridian, so clearing heat, resolving toxin, expelling wind and relieving pain are applied. *Qi bing san* can be applied for external used. *Qi she 30g* and *bing pian 3g* are grinded into powder, made into paste with sesame oil or rape oil, and then used to cover the focus, twice a day. It usually is cured after 2 to 4 days.

3) Tetanus: *duo ming san* of "*pu ji fang*" is effective to rigidity of neck and spasm due to tetanus. *Bai hua she 2cun*, *wu shao she 2cun* and *zhi wu gong 1* are grinded into powder. 9g is taken with warm wine every time, twice or three times a day.

4) Leprosy: "*yang yi da quan*" uses *bai hua she wan* to treat leprosy. The formula is *bai hua she 120g*, *chuan xiong 90g*, *tian ma 60g*, *qiang huo 60g*, *du huo 60g*, *bai fu zi 60g*, *dang gui 90*, *man jing zi 90g*, *bei xie 90g*, *fei xiong huang 15g*, *shi chang pu 45g*, *wei ling xian 90g*, *chan tui 90g*, *chi shao 90g*, *lei wan 90g*, *cang er zi 120g*, *zhi ke 60g*, *da feng zi 90g*, *fang feng 60g*, *shou wu 150g*, *jiang can 120g*, *niu xi 90g*, *ku shen 90*, *zao jiao 90g*, *gan cao 30g*. They are made into pills, and 9g is taken every time, twice a day.

Comment: this formula brings the drugs for researching wind, expelling wind, activating blood, nourishing blood, resolving toxin and eliminating dampness together. Continuous administration is helpful for leprosy.

5) Muscle atrophy: it is usually caused consumption of *qi* and blood and then failure of *qi* and blood to nourish cutaneous striae and tendon. So

supplementing *qi* and blood, warming liver and kidney, expelling wind and dredging collaterals are applied, assisted by massage. The formula is *zhi wu shao she* 90g, *zhi di bie chong* 90g, *zhi feng fang* 90g, *xian ling pi* 90g, *quan dang gui* 90g, *zhi huang jing* 90g, *zhi shou wu* 90g, *qi zi* 90g, *rou cong rong* 90g, *chuan shi hu* 60g, *sheng bai shao* 60g, *shu di* 60g, *lu xian cao* 60g, *zhi jiang can* 60g, *gan cao* 30g. They are grinded into powder and made into pill as large as mung bean with decoction of *xi xian cao* 120g, *sheng di* 120g, *shu di* 120g, *qian nian jian* 120g and *sang ji sheng* 120. 6g of the pills is taken every day, twice a day. This formula is suitable for *yin* deficiency type. *Shi hu* and *bai shao* are removed, and *ba ji tian* 60g, *yi zhi ren* 60g, *lu jiao shuang* 60g and *chuan gui zhi* 60g are added for *yang* deficiency.

6) Sequelae of encephalitis B: drugs for expelling wind, dredging collaterals, activating blood, soothing tendon, strengthening brain and opening orifice are applied for such sequelae as intelligence loss, poor memory, dysphasia, eyesight loss, limbs spas, tic, paralysis, slobbering and so on after high fever, coma and convulsion are relieved. Oral administration and laryngeal insufflation are used, assisted by acupuncture, moxibustion and massage. The therapeutic effect is quite good. This method is applied by Nantong TCM hospital and contagious hospital to treat many cases of sequelae of encephalitis B. The author also treated decades of cases when he did mobile medical work in Xiangshui county in 1970 and Haian county in 1972. The therapeutic effect was quite satisfied.

[case] patient *Huang*, male, 6. He suffered high fever, convulsion and coma during the middle ten days of July of 1972, and rescued by xinnan community hospital. After ten days, the temperature increased and he came to himself. But he had dysphasia, slobbering sometimes and tic sometimes. He did not recover after more than forty days. He visited the author on 2th, September, and was diagnosed as sequelae of encephalitis B. The coating was thin and greasy, tongue was purple, and the pulse was thin and rough. This was due to obstruction of phlegm and stasis, malnutrition of tendons and vessels and obstruction of collaterals, so dispersing stasis, eliminating phlegm, dredging obstruction and collaterals were applied to treat the disease gradually. (1) decoction: *zhi wu shao she* 6g, *dan shen* 6g, *hong hua* 6g, *guang di long* 6g, *chi shao* 6g, *jiang can* 6g, *sheng zi ran tong* 9g, *xi xian cao* 9g, *ji xue teng* 9g, *shen jin cao* 9g, *zhi mo yao* 2g, *zhi ru xiang* 2g, *gan cao* 2g. After they were taken for five doses, the followed powder was taken. (2) powder: *zhi wu shao she* 30g, *zhi jiang can* 24g, *zhi wu gong* 18g, *dang gui* 18g, *hua ju hong* 18g, *tian zhu huang* 18g, *guang di long* 18g, *hong hua* 18g. They were grinded into powder, 2g every time, three times a day. They were taken with water. (3) powder for laryngeal insufflation: *zhi wu shao she* 2.5g, *zhi bai fu zi* 2g, *pao fu zi* 2g, *chen dan xing* 2g, *bai zhi* 2g, *she xiang* 0.6g (added later). They are grinded into powder and stored in bottle. Small dose of the powder was used for laryngeal insufflation, three times to four times a day. After using these drugs for four days, he began to have voice. After one week, he could speak

smoothly. After one month, he could walk. But he felt the left limbs inflexible. He was asked to continue to take powder, do exercise and receive acupuncture and moxibustion. Follow-up revealed that he had recovered.

Comment: these formulas all use *wu shao she*, because it can expel wind, dredge collaterals, go into blood phase and tonify the body.

7) Spasmodic paralysis: supplementing liver and kidney, expelling wind, soothing tendon, dredging meridians and collaterals are applied for traumatic paraplegia which manifests as spasmodic paralysis. The main drugs are *wu shao she*, *qi she*, *di long* and so on. The experience of Shanghai TCM Research Constitute is basically coincident to ours. The formula is *zhi wu shao she 15g, qi she 15g, di bie chong 15g, quan dang gui 15g, shu di huang 15g, jin gou ji 15g, chuan niu xi 15g, ji xue teng 15g, di long 30g, lu jiao pian 9g, suo yang 9g, xu duan 9g*, decoction, one dose a day. *Xie wu pian* (the same dose of *quan xie* and *wu gong* are grinded into powder, added with proper dose of stiff paste and adhesive and then made into tablets. Every tablet weights 0.3g. 6 tablets are taken every time, twice a day.) is added for severe case.

8) Urticaria: the formula is *zhi wu shao she 9g, chai hu 9g, huang qin 9g, jing jie 9g, fang feng 9g, xu chang qin 9g, sheng gan cao 9g, chan yi 12g, chi shao 2g, dang gui 15g, bai zhi 6g, huang lian 6g*. The patient should avoid wind after taking drugs and should get slight sweating. The therapeutic effect usually comes up by three to five doses. Urticaria is relieved quickly and reoccurs fewer or cured, because *wu shao she* is good at expelling the wind in blood, and can reduce anthema and relieve itch, and is assisted by the drugs for nourishing *yin*, expelling wind, cooling blood and clearing heat.

[case] patient *Zhou*, female, 26, worker. She had urticaria many years ago and it had not reoccurred for many years. In the recent one month, it reoccurred because of over-work and diet. Small rash was as large as point, and large one was as large as palm. They were itch and burning hot. She had abdominal pain. The disease reoccurred four to five times every month. The coating was thin and greasy, and the pulse was slippery and rapid. This was the type of stagnation of wind and heat in *ying* phase. The treatment methods were expelling wind, clearing heat, cool and activating blood. Three doses of the formula mentioned above were prescribed. The disease was cured before the drugs were finished.

9) sequelae of infantile paralysis: *qi she* or *wu shao she* is mixed with sands, stir-baked in pan, and then sands are removed. The snake is grinded into powder. 3 to 6g of powder is taken with Shaoxing wine, twice a day. The drugs need to be taken continuously. It can not be disconnected. Pork, cucumber, Chinese toon and cushaw can not be taken. Doctor *Guo Shaofen* ③ uses *wu shao she* as main drug to treat 32 cases of sequelae of infantile paralysis, assisted by formulas which are made according to syndrome differentiation, acupuncture, moxibustion and massage. The therapeutic effect for sequelae of infantile paralysis is quite satisfied.

[case] patient *Chen*, female, 7. She suffered fever (38.2°C) for three days, accompanied with throat pain, choking cough, fatigue, poor appetite, unformed stool, general pain, weak lower limbs, and falls when she walked. PE: tendon reflex of lower limbs (-), flaccid lower limbs, right limbs especially, thin and greasy coating, slight red tongue, slight rapid pulse. She was diagnosed as infantile paralysis. It was due to heat-dampness and toxic factor that invades into lung and stomach, goes into meridians and collaterals, and invades into muscle and tendon, resulting in atrophy and paralysis of the body. The fever was abated and other symptoms were also relieved by drugs for eliminating dampness and heat, dredging collaterals and treating atrophy. Only flaccid right leg had been cured and she was difficulty in walking. They were sequelaes of infantile paralysis, and belong to atrophy syndrome. *Zhi wu shao she* powder was prescribed, 1.5g every time, three times a day. Massage was also applied. They were improved by half month, and cured by one month.

10) Psoriasis: 3g of *bai hua she* powder is taken with water every time, once a day.

[case] patient *Guo*, male, 45, cadre. He suffered psoriasis of neck, chest, abdomen and lower limbs for more than 3 years. The disease was severe in winter and spring. There was much white scurf and it was itch. The disease was treated by many times but without being cured. Later, he began to take *bai hua she* powder, 3g every time, once to twice a day. Itch was reduced by five doses and was stopped by 15 doses. The scurf also increased. The disease was cured after taking drug for two months.

11) Joint tuberculosis: it is also called *gu lao*, common seen in children and callan. All the joint can suffers this disease, but spine is most seen, followed by knee, coax, angle, shoulder, elbow and wrist. 2.5 g of *wu shao she* powder is taken every time, three times a day. *Liu zhou zi 0.6g* is added for severe pain; *lu jiao shuang 1.5g*, *chao bai jie zi 1.5g* for unsmooth discharge of pus; *zhi wu gong 1g* for discoalescent wound. The disease would be cured by continuous administration.

12) hemiplegia and rheumatoid joint pain: *qi she 24g*, *dang gui 15g*, *qiang huo 15g*, *fang feng 15g*, *tian ma 15g*, *qin jiao 15g*, *wu jia pi 15g*. They are soaked into 1.5kg of heated wine for seven days. 10 to 15ml is taken every time, twice a day.

Subsidiary Drugs: *Fu She*

Fu she is *Agkistrodon halys*. Its popular name is *di bian she*. It is included in “*pu ji yao fang*” in Ming Dynasty as formula. Because drugstores do not sell *fu she*, it is little used. In the recent years, there are more and more reported about *fu she* treating ulcer, lung tuberculosis and obstructed pain and the therapeutic effect is good. It is sweet in flavor, warm in nature, toxic and attributive to liver.

Its functions are similar to *bai hua she*. Besides treating leprosy, Bi syndrome and atrophy syndrome, it can resolve toxin, treat ulcer, eliminate

enlarged lymph node, stop bleeding and tonify the body. It is often soaked into wine for drinking to treat rheumatoid arthritis, for example, Changni District guanghai hospital of Shanghai uses *san she jiu*, yaosai community hospital of jiangyin county uses *wu she jiu*. Both of them use *fu she* as main drug. It is made into pills, powder or soaked into wine for leprosy. Both of oral administration and external use are suitable for enlarged lymph node and severe ulcer. "*ri ben he han yao kao*" use baked *fu she*, named *fan bi shuang*, to stop bleed and treat severe ulcer. It is soaked into oil for 50 days, and steamed for a moment. Its external use can treat common swelling, pain, trauma and ulcer. Folk uses it to treat fistula, bone tuberculosis, lung tuberculosis, etc..

Venin of *fu she* is mixture of neurotoxin and hemocircular-toxin, but hemocircular-toxin is dominating. Besides local swelling and pain, the patient bite by *fu she* usually has such manifestations due to neurotoxin as aversion to cold, blurred eyesight, prolapse of eyelid, rigid neck and dyspnea, even respiratory paralysis endangering life. Thus it can be seen that the functions of *fu she* and *bai hua she* are similar because their venom are all mixture of neurotoxin and hemocircular-toxin.

Because of warm nature, it should be careful when it is used for *yin* and blood deficiency. Or drugs for nourishing blood are added. The dose usually is 3 to 6g for decoction, and 0.6g to 1.2g for powder. The clinical applications are:

1) Suppurative infection of soft tissue: linkou hospital of Heilongjiang province uses *fu she di ding jiu* to treat suppurative infection of soft tissue, such as folliculitis, furuncle, carbuncle, cellulitis, panaris, bedsore, etc.. They receive quite satisfied effect. One to two live *fu she* is put into bottle, and added with 1000ml of 70% alcohol and 30g of *zi hua di ding*. The bottle is sealed off and put in cool place. After three months (the longer, the better.), it can be used. Alcohol can be added into the drugs later when it is used. The total amount of added alcohol is less than 1000ml, avoiding the therapeutic effect is reduced. Absorbent cotton ball with the solution is used to cover the focus, and then covered by plastic cloth. The finger or toes can be covered by fingers of plastic glove. It can be changed for many times to keep cotton ball moist. They treat 79 cases. There are 15 cases of carbuncle, among which 13 cases are cured and 2 cases are improved obviously. There are 26 cases of furuncle, among which 10 cases are cured, 12 cases are improved obviously, and 4 cases are of invalid. 29 cases of folliculitis are cured. There are 6 cases of panaris, among which 3 cases are cured and 2 cases are improved obviously. One case of cellulitis is cured. There are 2 cases of bedsore, among which one case is cured and one case is improved obviously. Additionally, the pain is relieved right away and pulpitis is cured when it is used for 6 cases of pulpitis with unbearable toothache, and disease does not reoccur in short time (3 to 5 months).

This wine has functions of diminishing inflammation, promoting granulation

and heal-up and relieving pain. If it is used for ulcerated wound, temporary burning pain (about one minute) comes up, then numbness emerges and then pain is relieved. There is no other side effect.

[case] patient *Yu*, male, 45, farmer. He suffered cellulites in his right neck with ulceration and pus. The floating skin was dark brown. There was a pus cavity of 8*10cm. The method was used once a day. After using for five days, there was no pus and new granulation came up. After using for 12 days, the floating skin healed up. The disease was cured after using for 16 days.

As for method for making the drug wine, editor's comment of "New Medicine Journal" can be referred. He says, if the drug wine is made by live snake, there may be extreme fishy, because the mouse and frog ate by snake would rot in the digestive tract and there is stool when the snake struggles for survive; so live snake should be killed and the organs are removed at first; or live snake hungers for 4 to 5 days, so as to let the food digested and stool discharged, and it is extruded before be soaping.

2) Infiltrative lung tuberculosis: according to folk application that poisonous snake can treat fistula, Jilin herbs research constitute uses *she ye* ④ to treat 63 cases of infiltrative lung tuberculosis, receiving certain therapeutic effect. Distillate of the whole *fu she* (the comment mentioned above should be referred.) is made into 1:1 solution, named *she ye*. Method: 2 to 5ml of 1:1 *she ye* injection is used as intramuscular injection twice a day. The patients whose course of treatment longer than two courses are analyzed. Results: *she ye* is used alone for 63 cases of lung tuberculosis with different pathological changes. After being observed for 2 to 7 months, common symptoms are improved. Judging from X ray, the therapeutic effect of infiltrative type is obvious and the course is short; other pathological changes are improved at different degrees. Reactions: 2 cases have drug ash urticaria after using the drug for 7 to 10 days and the ash disappeared after treated by antiallergic drugs (about one week) without stopping using *she ye*. 10 cases felt general burning hot and the temperature is 37.1°C to 37.2°C. It needs further research whether it is relative to the drug. Herbal books record that *fu she* can treat swelling, severe ulcer and bone ulcer. It is considered commonly that bone tuberculosis belongs to severe ulcer and bone ulcer. Shuangfang county dongfeng community health center of Jilin uses *she ye* to treat bone tuberculosis receiving good effect. Referring to this practice, application of *she ye* on treating lung tuberculosis is worthy further study.

3) Rheumatic arthritis, rheumatoid arthritis and sciatica: jiangyin county yaosai community hospital use snake such as *fu she* and other drugs for expelling wind, dredging collaterals, activating blood, soothing tendons, supplementing kidney and strengthening bone to soap wine. It is named *feng shi she yao jiu* (or *wu she jiu*). It is used to treat rheumatic arthritis, rheumatoid arthritis and sciatica, receiving satisfied effect. The formula is *fu she* 124 strips, *wu shao she* 110 strips, *yan jing she* 20 strips, *qi she* 20 strips, *chi lian she* 24 strips, *bi bie chong* 12 liang, *ji xue teng* 10 jin, *zhuan di f eng*

10 jin, wu jia pi 10 jin, fang ji 6 jin, dang gui 6 jin, chuan duan 6 jin, niu xi 6 jin, qiang huo 6 jin, du huo 6 jin, sang ji sheng 6 jin, hai feng teng 4 jin, wei ling xian 4 jin, cao he che 4 jin, cang zhu 4 jin, gou ji 4 jin, qin jiao 4 jin, hong hua 2 jin, gui zhi 2 jin. They are soaked in 400 jin of white wine and sealed off for about one month. The solution is filtered for drink, 25g every time, twice a day.

Internal department of changning district guanghua hospital of Shanghai ⑤ uses *san she jiu* as main drug, which is made by such drugs as *fe she*, to treat rheumatoid arthritis, receiving good effect. It is worthy referring.

4) Severe ulcer, fistula, obstinate obstruction and leprosy: one live *fu she* is soaked into one *dou* of wine, and then sealed off in the earth. After one year, it is picked up and the snake has been dissolved. Several small cups of the wine are drunk once a day for severe ulcer, fistula, obstinate obstruction and leprosy. When the patients feel cool sensation blowing gently, the disease is going to be cured.

She Tui (snake slough)

It is also called *long yi*, and its popular name is *she ke*. It is mild in nature, salty and sweet in flavor, nontoxic and attributive to liver meridian.

The functions are (1) expelling wind, stopping convulsion, (2) resolving toxin and preventing pathogenic factors, (3) improving eyesight and removing nebula. It is suitable for severe ulcer, acute laryngitis, rigid tongue, retention of placenta, acariasis, favus, itch and anthema. It is often used alone in ancient time. It is a new find that contemporary doctor uses it to treat brain cysticercosis with effective rate of 79.2%

Pregnancy women and the patients without toxic wind are contraindications. The dose usually is 3 to 6g for decoction, are 0.6 to 1.2g for powder. The clinical applications are:

1) Mumps: 6g of *she tui* is washed, cut and stirred with two chicken eggs. It is stir-baked with oil (a little salty can be added) and ate by once (no egg and doubled doses for adult). Usually the effect comes up by one dose. The therapeutic effect is bad for the patient who has disorder of digestive tract and eats one dose of drug by many times. Continuous administration is effective indeed.

[case] patient *Wang*, male, 8. he suffered right mumps for 7 days. The manifestations were swelling, pain, thin and yellow coating, and rapid pulse. It did not be cured by other drugs, so *she tui dan* is prescribed. It was cured by one dose.

2) Brain cysticercosis: brain cysticercosis study group of Shenyang seventh people's hospital uses *she tui* to treat brain cysticercosis ⑥. According to date analyze of 250 cases, 38 cases (15.2%) are improved obviously (node and symptoms disappears for more than 5 years), 160 cases (64%) are improved (node disappears or increases, symptoms are relieved, interval of tic is prolonged.), 50 cases (20%) are of invalid, and 2 cases (0.8%) die. The symptoms are relieved and the node is reduced or disappears after using drugs for 3 to 4 months. The symptoms disappear after using drugs for one

year. Satisfied therapeutic effect comes up after using drug for more than 2 years. *She tui* is grinded into powder, 5g every time, twice a day. It is taken with water. *Da ji tang* (*bing lang* 60g, *da ji* 3g, *mu gua* 18g, *gout eng* 12) is taken at the same time. *Ju hua* 12g is added for dizziness; *bing lang* is removed, and *lei wan* 18g is added for hepatitis. The drugs are decocted into 150ml from 500ml of water, 50ml every time, twice a day. The formula can be taken continuously for about 30 doses. This develops *she tui*'s functions of expelling wind, stopping convulsion, resolving toxin and kill parasite, and is worthy studying and applying.

3) Surgical diseases: *huang ba du san*, a folk formula, can draw pus and toxin, generate granulation and promote heal-up, and is quite effective to carbuncle, floating ulcer, lumbodorsal carbuncle, carbuncle on nape, enlarged lymph node, furuncle, toxic dampness, pus of ulcer, etc.. Zhejiang TCM hospital uses the followed formula with effective rate of 90%. The formula is *long yi* 12g, *pao shan jia* 12g, *zhi quan xie* 12g, *ming xiong huang* 30g, *niu bang zi* 30g, *wu gong* 6g, *bing pian* 6g (added later). They are grinded into powder. A little dose of the powder is spread on the ointment for external use, changed once to twice a day until it is cured.

4) Sty: its popular name is *tou zhen yan*. The formula is that *she tui* is soaked in vinegar for use. *She tui* is picked out to cover the focus, once a day. It usually is cured after 1 to 3 days. It is most suitable for reddish swelling in early stage.

5) Chronic otitis media: this disease is longy and not easy to be cured. The two formulas followed can be used. (1) *long fan san*: *long yi* (baked into yellow color by mild fire) and *ku fan* are grinded into powder with the same dose. After the ear is washed by hydrogen peroxide solution, 0.06 to 0.1g of the powder is put into ears, once a day or two days. It takes effect by several times. (2) *she tui* 97%, small *zhi zhu* 2% and *bing pian* 1% are grinded into powder. After the pus is washed away in chronic suppurative otitis media, the powder is put into ear once a day. It can expel wind, resolve toxin and relieve pain, and takes effect by 3 to 4 times.

6) Herpes zoster: doctor *Wu Decai*, et al ⑦, uses *she tui* to treat herpes zoster receiving good effect. Method: *she tui* is grinded into powder and made into ointment with olive oil. It is dipped by writing brush or cotton swab to cover the focus, twice or three times a day. In order to preventing ointment from staining the clothes, it can be bound up by gauze. Therapeutic effect: herpes is stopped spreading and shrink, and the pain is relieved after using drug for twice to three times. It form scab and is cured after three to four days.

[case] patient *Su*, male, soldier. He felt left back burning hot and pain in August, 1974. PE: herding blister as large as soybean on left back, red base, zonal distribution, enlarged axillary lymph nodes with tenderness. He was diagnosed as herpes zoster, and prescribed *she tui you gao* for external use. Herpes shrunk, and the pain disappeared after using drug for one day. It form scab and was cured after two days.

7) Mouth ulcer: mouth ulcer is an obstinate and common disease. *She tui* (soaked by cool boiled water into soft form) is used to swab to focus. It is cured after using for once to twice. *She tui* is used to stick on feet center.

8) Cornea nebula: one *she tui* is washed, dried in sunshine, cut, made into biscuit with flour, baked into *ustal* and then grinded into powder. 3g are taken after meal with mater, twice a day. Continuous administration can cure the disease. Or *she tui* (washed by wine) is baked into yellow color and then grinded into powder. 1.5g is taken every time with water after meal, three times a day until the nebula is abated.

9) Mastitis: 4.5g to 6g of *she tui* is burnt into ash and grinded into powder. It is taken with 50 to 100g of Shaoxing wine, one dose a day. Breast-feed is stopped during the period of taking drugs, milk is drunk up and washcloth is used for hot compress.

10) Hemorrhoids fistula: baked *she tui* 7.5g, *wu bei zi* 7.5g, *long gu* 7.5g and *xu duan* 15g are grinded into powder. A little dose of *she xiang* is added. They are mixed with saliva and then used to cover the focus. It is effective to hemorrhoids fistula with blood and water-like substance oozed out.

11) Sarcoptic mange: the decoction of *she tui* 6g, *ku shen* 15g, *she chuang zi* 30 and *bai fan* 9g can be used to wash the focus once a day for itch.

1、 Changning district guanghua hospital of Shanghai: to find the rules of treating rheumatoid arthritis by practice, to guide combination of TCM and western medicine by syndrome differentiation. Dialectics of Nature Journal, page 139, 4, 1976, Shanghai people's publish house.

2、 *long she san* treating rheumatoid arthritis, New Medicine 4:202, 1973

3、 experience introduction on *wu shao she* treating infantile lower limbs paralysis, Intermediate Journal 4:55, 1959.

4、 *she ye* treating infiltrative lung tuberculosis, Jilin Medicine 4, 1974

5、 observation on therapeutic effect of combination of TCM and western medicine on 500 cases of rheumatoid arthritis, New Medicine and Pharmacology Journal 5: 1973

6、 summarization on therapeutic effect of *she tui* treating brain cysticercosis, Liaoning Medicine 1:10, 1970

7、 *she tui* treating herpes zoster, Herbs Communication 3. 1975

14 shou gong (gecko)

Shou gong is whole body of *Gekko chinensis* Gray or its sibling. It is also called *tian long*, produced in Jiangxi, Zhejinag, Anhui and other provinces. It is salty in flavor, cold in nature, slight toxic and attributive to heart and liver meridians.

The functions are 1) expelling wind, stopping convulsion, 2) resolving toxin, softening hardness, 3) dredging collaterals and treating paralysis. It can be used for scrofula, Bi syndrome, paralysis of wind stroke, wind spasm, convulsion, epilepsy, and infantile diarrhea due to malnutrition. Because it is good at attacking the stagnation of *qi* and blood, it is often used to treat severe ulcer and tumor. It can draw pus, generate granulation, and promote

the growth of tissue, so it is effective to longy ulcer with fistula. Tissue solution made by some hospital is effective to neurasthenia, dyspepsia, headache nervosa, optic atrophy, etc.,

It should be washed right away if the skin touches urine of gecko. If the urine is absorbed by skin, congestion, edema, bleeding, necrosis and neutrophilic leukocyte infiltration of muscle layer would comes up in mild case, and central nervous system would injured and results in spinal degeneration, respiratory paralysis and even die from respiratory failure. So it should be carefully when one is catching gecko.

The dose usually is 4.5g to 9g for decoction and 1g to 2g for powder. Minority of patients would have dry mouth and constipation after taking *shou gong*. It can be improved by tea of *mai dong 9g* and *jue ming zi 9g*. The clinical applications are:

1) Lung tuberculosis, scrofula, kidney tuberculosis and bone tuberculosis: Jiangxi TCM hospital uses *kang jie he he ji* to treat these diseases, with the help of *yang gu hu zheng san* and *zhi jing san*. *Kang jie he he ji* is *shou gong* powder 3g (taken after being mixed the decoction), *mao zhua cao 30g*, *yi mi ren 30g*, *tian kui zi 15g*, *bai bu 15g*, *sheng mu li 15*. *Yang gu hu zheng san* is sheep bone (the whole bone of one sheep is burnt into rash.), *zhi ma qian zi 30g*, *zhi fu pian 60g*, *chao jia zhu 60*. They are grinded into powder and filled into 120 parcels. One parcel is taken with water, twice a day. Sweet wine is drunk as guiding drug. They are finished in two months, and are effective to bone tuberculosis. *Zhi jing san* is that *wu gong* and *quan xie* are grinded into powder, 1g to 1.5g every time, twice a day. It is effective to the pain of tuberculosis disease, so it usually is used with the former two formulas. In clinic, the first formula is effective to tuberculosis meningitis, mesenteric scrofula, nasopharyngeal cancer, thyroid tumor, hematuria without tangible reasons, etc..

Doctor *Yang Tingbin*, et al ^①, use *shou gong* powder (1g every time, three times a day, longy administration) to treat 12 cases of bone tuberculosis, among which 8 cases are cured and begin to work again, 4 cases are improved in different degrees.

[case] (1) patient *Li*, female, worker. She suffered thoracic vertebra tuberculosis for 13 years, and left groin scrofula with 8*2cm ulceration for 1 year, accompanied with left lower limb pain. She began to feel back pain when she was 5 years old, aggravated gradually and diagnosed as thoracic vertebra tuberculosis by some hospital. The disease by improved by antituberculous. It reoccurred after 3 years. It did not controlled by drugs and caused spinal distortion. Two years ago, tumor in left groin came up and rot without healing up for more than 1 year. PE: tenderness of T 6,7,8, 8*2cm ulceration of left groin lymph node. *Kang jie he he ji* and *zhi jing san* were prescribed for five doses. The pain was relieved and then *yang gu hu zheng san* was taken for two months. It was cured. (Jiangxi TCM hospital)

(2) patient *Liu*, female, 44. She suffered thoracic vertebra tuberculosis (T

10--12) and was treated by rimifon and streptomycin without therapeutic effect. She had paralysis of lower limbs and had lied down on bed for more than 8 months. There was a cold abscess as large as a bowl on T 10—11 and ulcerated. The wound healed up after taking *shou gong* powder for more than 6 months. Paralysis of lower limbs was improved gradually.

Comment: there is another formula to resolve toxin, relieve pain, disperse stasis and activate for bone and joint tuberculosis. The formula is *shou gong* 60g, *wu gong* 60g, *di bie chong* 60g, *zhi ru xiang* 30g, *zhi mo yao* 30g, *san qi* 30g, *hong hua* 30, *pao shan jia* 15. They are grinded into powder and made into tablets with excipient. Every tablet weights 0.5g, 6 tablets are taken every time, twice a day.

2) Terminal stage of lung cancer: longhua hospital of Shanghai uses the followed formula to treat terminal stage of lung cancer. 27 cases are treated, among which 2 cases are improved obviously, 15 cases are improved and 10 cases are of invalid. The formula is *shou gong* 9g, *gan shu pi* 9g, *tian dong* 9g, *mai dong* 9, *nan shao shen* 12g, *bei shao shen* 12g, *bai bu* 12g, *ba yue zha* 12g, *xia ku cao* 15g, *ting li zi* 15g, *yu xing cao* 30g, *shan hai luo* 30g, *jin yin hua* 30g, *bai ying* 30g, *she she cao* 30g, *sheng mu li* 30g, *ku shen* 30g, decoction, one dose a day.

Yangpu district TCM hospital of Shanghai uses the method of supplementing healthy *qi* and attacking cancer by combination of TCM and western medicine to treat 14 cases of terminal stage of lung cancer, receiving some therapeutic effect. The methods of supplementing healthy *qi* are nourishing lung *yin*, supplementing lung *qi*, strengthening spleen, tonifying kidney, etc.. The methods of attacking cancer are achieved by herbs and chemotherapeutics. (1) eliminating swelling, resolving toxin, dispersing stasis and softening hardness: *shou gong* powder 1.5g, *wu gong* powder 1.5g and *di bie chong* powder 1.5g taken by two times. *She liu gu* (decocted early for one hour), *sheng ban xia* 30g, *sheng nan xing* 30g, *qi ye yi zhi hua* 30, *yang ti gen* 30g, *tie shu ye* 30g, *she she cao* 30g, *sheng lu* 15g, *shu pi* 15 are decocted. They are used for big tumor, obstructive pneumonia and obstructive atelectasis. (2) chemotherapeutics: three or four kinds of the followed drugs are used once to three times a week: cyclophosphamide 0.4 to 0.6g every time, 5-FU 0.5g every time, chenkwangmycin 30 thousand unit every time, mitomycin C 2 to 4mg every day, leurocristine oncovin 1 to 2 mg every time. Supplementing healthy *qi* and attacking cancer are used according to the stages. Herbs are used to supplement healthy *qi* and chemotherapeutics are used to attack cancer to inhibit the disease when the body and tumor are equal. After body struggles with tumor and then become smaller, chemotherapeutics are stopped to be taken because body toleration to chemotherapeutics is low and side effect is big, so herbs for Supplementing healthy *qi* and attacking cancer are used. When the body recovers, chemotherapeutics are used again. Therapeutic effect: total effective rate is 64.3%, 1 case of obvious effect, 4 cases of good effect, 4 cases of effect and 5 cases of non effect.

3) Esophageal cancer: Wenzhou anticancer group ② uses *tian long* powder to treat 4 cases of esophageal cancer (diagnose is confirmed by barium meal test.). After treatment, dysphagia disappears, appetite and weight are promoted, and focus become smaller or disappear checked by barium meal test. Method: *tian long* and rice are baked into sallow color and grinded into powder. 1 to 2 strips of *tian long* are taken by two to three times in one day. It is takee with small dose of Shaoxing wine.

4) *Yin* bone furuncle, floating phlegm and obstinate ulcer without healing up for long time: *long hu shi jiang dan*, a secret formula for bone tuberculosis handed down from doctor *Yu Chengying's* ancestors③, can promote the absorption of focus and recovery of bone. The applications are: (1) *Yin* bone furuncle, mainly refers to deep abscess and bone tuberculosis; (2) floating phlegm: mainly refers to subcutaneous node, swelling and distorted joint, scrofula, etc.. (3) obstinate ulcer without healing up for long time: fistula forms with clear pus. The formula is *shou gong* 120g, *qi she* 120g, *hai hu* (*hai ma* or *hai ju* also can be used) 60g, *wu gong* 60g, *quan xie* 60g, *pao shan jia* 60g, *di bie chong* 60g, *lu feng fang* 60g, *lu jiao jiao* 60g, *ban mao* 15g (sitr-baked into sallow with 50g of glutinous rice). *Shou gong*, *qi she* and *feng fang* is put into separately into hermetic earthen jar, sealed off by earth, and then baked by mild fire for about half hour until the drugs become sallow (not carbonized). These three drugs are grinded into powder with other drugs. *lu jiao jiao* is melt by Shaoxing wine and mixed with the powder. They are made into pills with honey. 9 to 12g is taken every time, twice a day. The drugs with the dose mentioned above should be finished within 30 to 50 days (depending on patient constitution, age and tolerance to drugs). After one course is finished, another course begins after ten days later. The drugs take effect by two to three courses. Points for attention: (1) pungent food, cock, carp and beef should be avoid during the period of taking drugs. (2) the patient should have good rest and good nutrition during the period of taking drugs and when the disease is improved. (3) it should be careful for the patient with kidney and urine system disease to take the drug, or reduced dose is applied. The drug should stop to be taken and decoction of *liu yi san* and mung bean soup should be taken if the patient has lower back pain, urgent urine and hematuria. This kind of side effect would be reduced by correct making process and proper dose. (4) besides this formula, *ba du qu fu gao* (*hong sheng dan* 30g, *bing pian* 1.5g, *wu zei gu* 15g are grinded into powder and mixed with sesame oil or Vaseline. The powder also can be used.) should be used for ulceration of bone tuberculosis without healing up for long time. (5) *tui che san* (*qing lang chong* powder) or surgery is used for big dead bone in the fistula.

[case] patient *Chen*, male, 50, worker. He suffered swelling and distortion of right ilium joint for eight to nine years. He received many treatments without effect, such as herbs, western medicine, acupuncture, moxibustion, acupoint injection, etc.. the pain was severer in March of 1962, right ilium joint and right knee were rigid. He had poor appetite, weight loss and thin body, then bulge

of ilium joint, fierce pain, diffuse swelling, tidal fever and restlessness. He was diagnosed as right ilium joint tuberculosis by X ray. He was hospitalized for three months without effect. The patient refused to receive surgery and came to our hospital. He was treated by the method mentioned above. The pain was relieved a lot and walk became better after taking drugs for 45 days. The pain disappeared and health condition was improved obviously after three courses in November. X ray showed that border of right ilium was clear and necrotic bone began to grow in February of next year. After regulating for more than one month at home, he began to work again. Recent follow-up showed no reoccurrence. He only felt a little pain and uncomfortable after over-work or during the changes of weather.

Comment: the drugs of the formula are all animal drugs, mainly insect drugs. Due to the powerful functions of warming meridian, dredging collateral, removing stale, generating new substance, resolving toxin, attacking hardness, promoting granulation and treating ulcer, it is effective to *yin* furuncle and obstinate such as bone tuberculosis, fistula with dead bone and enlarged lymph node. Because it contains *ban mao*, the drug should be taken from small dose and mung bean soup is drunk frequently.

5) poisonous snake bite: *hua du san* (*tian long* 10 strips, *wu gong* 20 strips, *ban mao* 5 (without head and feet), *di ong* 1.5g *quan xie* 1.5g. they are grinded into powder, 1.2g every time, taken with water.) is effective to poisonous snake bite. One parcel is taken every 5 hours for mild and moderate case. The mild and moderate disease is cured by 4 to 5 parcels, severe case with strong constitution usually need 6 to 7 parcels. Pregnant women and weak patient should take half parcel every three hours. Decoction of *che qian zi* 9g, *liu yi san* 15g or *lv dou* 120g and *bai mao gen* 60g is taken frequently for urine pain after taking drugs.

6) Enlarged lymph node: *shou gong san* is used for ulcerated enlarged lymph node. *Shou gong* 5 strips are cut, dried in sunshine, baked into carbonized form in clean tile, and grinded into powder for external use, changed one a day. After two weeks, the wound heals up. 50 strips of *shou gong* are grinded into powder and then filled into capsules for enlarged lymph node without ulceration. 2 to 3 capsules are taken every time, three times a day. Reduced dose is taken for children. The drug takes effect after two to three weeks. It is helpful for neck enlarged lymph node of cancer metastasis.

50 strips of *shou gong* are soaked into 750g of rape oil or decocted until *shou gong* is melted. The oil is put out for three to five nights to remove fire nature. The oil is used to cover focus. The focus without ulceration would be eliminated, and one with ulceration would heal up.

[case] patient *Shen*, female, 34. She once suffered lung tuberculosis, and had depressed emotion and thin body. In the recent half year, hard nodes came up in neck and became larger gradually. There were 13 nodes. The coating was thin, tongue was slight red, and the pulse was thin and wiry. This was due to liver depression and phlegm stagnation, so attacking stasis,

eliminating stagnation, eliminating phlegm and hardness were used. 30 strips of *shou gong* are washed, dried by fire, grinded into powder, and filled into capsules. 3 capsules were taken every time, three times a day. The nodes began to become smaller after one week and eliminated obviously after two weeks. It was cured after three weeks.

7) Toxic swelling: a live *shou gong* is put into one chicken egg and sealed off. It is melted after one week (the bone is still left.). It is used to cover the focus and toxic swelling would be eliminated by two to three days. *Zhouping* county mingji community health center of Shandong uses this method to swelling pain due to scorpion or honeybee bite. 20 cases are observed and cured. It shows that its functions of resolving toxin, eliminating swelling and stopping pain is quite reliable.

8) Gash fistula: it is usually seen after the surgery such as stomach, intestine, gallbladder surgery, incision and drainage of abscess, debridement, gynecological surgery, etc.. Doctor *Wang Chongjiu*, et al ^④, use *shou gong san* to treat 45 cases of gash fistula with satisfied therapeutic effect. *Shou gong san* is used externally and *san qi he ji* is oral taken. *Shou gong san*: *shou gong* is washed and baked on the tile by mild fire (can not baked into carbonized form), grinded into powder. After the focus is washed by physiological saline, *shou gong san* is used to cover the focus, and then covered by gauze to keep clean. It is changed once a day. *San qi he ji*: *sen san qi 2g*, *chuan bei 2g*, *bai ji 2g*, *di bie chong 1g*. They are grinded into powder, and 1g to 2g is taken every time, three times a day. 7 days compose one course of treatment. The drugs can be taken for another course of treat if necessary.

9) *Lian chuang*: it is lower limbs ulcer. The folk uses yolks of two chicken eggs to extract oil, and then one strips of *shou gong* is added to extract oil continuously. The oil is used to cover the focus, once to twice a day. The wound heals up quickly.

Comment: both *bai hua she* and *shou gong* can researching wind, dredging collaterals, attacking toxin and stopping convulsion, and are important drugs for resolving toxin. *Bai hua she* is good at resolving wind, and *shou gong* are good at breaking stagnation and eliminating hardness. It should be careful when *bai hua she* is used for blood deficiency and body fluid injury, and *shou gong* can nor be used indiscreetly for the cases without hard node due to stagnation of stasis and phlegm.

1\ *bi hu* treating bone tuberculosis, Barefoot Doctor Journal 2:25, 1977

2\ *tian long fen* treating esophageal cancer, Zhanjiang Science and Technology 3, 1973

3\ *long hu shi jiang dan*—a secret formula for bone tuberculosis, Zhenjiang TCM Journal 12:414, 1965

4\ observation on *shou gong san* treating gash fistula, Jiangxi Medical Journal 4:187, 1964

15 Ban Mao (cantharides)

Ban mao is mainly produced in He'nan, Guangxi, Jiangsu, Sichuan and Anhui provinces. *Ban mao* sold in drugstores is *Mylabris Phalerata* Poll. and *Mylabris cichorli* L.. It is pungent in flavor, cold in nature, toxic and attributive to large intestine, small intestine, liver and kidney meridians.

The functions are (1) dispersing stasis, breaking stagnation, (2) corroding muscle and attacking toxin. It once was used for blood stagnation, tumor, severe ulcer, fistula, acariasis, dead muscle, enlarged lymph node, furuncle, urine system infection, dog bite, malaria, obstructive pain, etc.. Because of fierce toxin, it is often applied for external use in ancient time. In the recent years, doctors expand the application scope through further study and practice. Especially, it is confirmed by animal experiments that *ban mao* can obviously inhibit many kinds of transplant cancer.

Ban mao contains cantharidin, fat, resin, formic acid, etc.. The short-term therapeutic effect

cantharidin on cancer is good, such as primary liver cancer, lung cancer, esophageal cancer, rectum cancer, breast cancer, etc.. The therapeutic effect is promoted by combination use of cantharidin, chemotherapy and actinotherapy, and the amount of WBC would not decrease badly. It is a break of application and research of *ban mao* in a sense. *Ban mao* also can treat chronic hepatitis.

On the base of the researches of cantharidin, Tianjin pharmacon test and research institute ① made hydroxycantharidin in 1972, a new anticancer drug.

1) Hydroxycantharidin can obviously inhibit ascites of mouse liver cancer and directly kill cancer cells in ascites. It does not injury body immune system. Except that it results in mild inflammatory changes of urine system, it does not infect other systems.

2) Injection and tablet of hydroxycantharidin are used to treat 194 cases of cancer (156 cases of liver cancer, 28 cases of gastric cancer, and 10 cases of esophageal cancer). The effective rate is 35% to 66% (average rate is 54.5%) for primary liver cancer, and AFP of part cases became negative. Additionally, it can make esophagus unobstruction for esophageal cancer.

Overdose of *ban mao* can causes such toxic symptoms as nausea, vomiting or vomiting bloody water-like substance, abdominal angina, hematuria and even death. The pathogenic mechanisms are that it can effect small vessel wall directly and expand cell interval, increasing permeability. Autopsy of the dead patient due to overdose of *ban mao* reveals necrotic mucous membrane of esophagus and gastrointestinal tract, congestion of urine system tract, hemorrhage of renal calices, renal pelvis, ureter, bladder and ovary, perirenal and periurethral hemorrhage and heart hemorrhage. Microscopic examination shows renal tubule hemorrhage. The degree of toxic symptoms and pathogenic changes is relative to dose. Early and timely rescue and treatments according to symptoms can cure toxic patients.

External use and vesiculation can stimulate skin fiercely. If the area is too much wide and the dose is too large, the toxin can be absorbed by skin and

causes vomiting, headache, high blood pressure and other toxic symptoms, and even nephritis and cystitis.

In order to reduce side effects, the dose must increase gradually from small dose, and drugs for resolving toxin should be taken frequently at the same time, such as mung bean soup, soya-bean milk, or decoction of *lv dou* 120g, *liu yi san* 18g and *huang bai* 12g. *Che qian cao* 30g, *mu tong* 6g, *zhu ling* 15g, *bai mao gen* 120 can be decocted or *qing dai* 6g are taken with water for prickly pain or even hemorrhage of urethra. *Ban mao* can stop to be taken for several days for the patients with severe response. *Ban mao* is stir-baked with glutinous rice into dark yellow so as to reduce the toxin for oral administration. The dose is 0.06 to 0.15g for one day, and the dose is reduced for women and children. Pregnant women and weak body are contraindications. Proper dose is used for external use. The clinical applications are:

1) Liver, lung, breast, esophageal and rectum cancer: Shanghai huanghe pharmaceutical factory extracts cantharidin from *ban mao*. Cantharidin is made into *ban mao su pian* and *ban 1 pian*. One tablet of *ban mao su pian* contains cantharidin 0.5mg, *ba ji* powder 40mg, *hai piao xiao* 60mg. One tablet of *ban 1 pian* contains 100mg of water decoction of residue from which cantharidin has been extracted, Aluminum hydroxide 20mg, Magnesium Trisilicate 20mg, *qing dai* powder 50mg, *bai ji* powder 500mg. Short-term therapeutic effect of these two prepared drugs on the cancers mentioned above is good. The hospitals such as Shanghai zhongshan hospital and tumor hospital use *ban mao su pian* ② (some cases also are treated by chemotherapy and radiotherapy at the same time.) to treat more than 300 cases of primary liver cancer, receiving good short-term therapeutic effect (65% of total effective rate). The symptoms are improved, disease condition is steady, lifetime is prolonged, and tumor is reduced in part cases. The WBC of more than 180 cases who receive chemotherapy at the same time is stick to 4000/mm³.

The side effect is stimulus-symptoms of urine system and gastrointestinal system. Some patients have paroxysmal tachycardia, numbness sensation of fingers and face. The reaction degree depends on dose and individuality. The side effect can be reduced or avoided if the dose and administration method are proper. The common dose is 1 to 2 tablets of *ban mo su pian* every time, three times a day, and 2 to 4 tablets of *ban 1 pian* every time, three times a day. The dose increases from small dose, such as two tablets. Heart failure, kidney failure, severe peptic ulcer with gastrointestinal bleeding tendency and pregnant women are contraindications.

2) Esophageal cancer: Wuxi second people's hospital uses *ban mao dan* ③ to treat terminal esophageal cancer with chemotherapy, receiving certain therapeutic effect. One *ban mao* without head, wings, feet and hair (hair should be brushed away, because it can cause nausea and vomiting.) is put into a chicken egg which has a small hole. They are steamed for about half hour, then *ban mao* is picked out. *Ban mao* is cut into three pieces, one piece

every time. The egg also can be taken by three times. As for terminal esophageal cancer patient who can only eat liquid food due to narrow esophagus and dysphagia, *man bao* is stir-baked with glutinous rice (until the rice become yellow), grinded into powder. One *ban mao* is taken with honey water every time, once a day.

Therapeutic effect: 38 cases survive, among which 21 cases survive for more than 1 year, 16 cases survive for more than 2 years, and one case survives for more than 3 years. 9 cases die from metastasis. These 9 cases are terminal cancer patient, and all of them can eat before death, such as rice, glutinous rice dumpling, boiled rice dumpling. Nobody is died from hungry or pain. X ray confirms that cancer of these 38 cases does not become severer. More-than-one-year-clinical practice confirms that obstruction is resolved gradually after taking *ban mao*, and that the patient can eat porridge after taking seven *ban mao* and can eat rice after taking 20 *ban mao*. Continuous intake for long time is helpful. Majority of patients have urine pain and hematuria after taking drugs, and then symptoms are relieved and bearable after drugs for promoting urine and resolving toxin, such as *che qian*, *mu tong*, *ze xie*, *hua shi*, *da ji*, *xiao ji*, *bai jiang cao*, etc..

These 38 cases are treated by *ban mao* and chemotherapy, that is, endoxan (100mg), chenkwangmycin (15mg) or fluorouracil (250mg) are used for 15 to 80 times at the same time, and VitC and VitE are also used as adjuvant therapy. If the amount of WBC reduces, chemotherapy is stopped and only *ban mao* is used into order to avoid too much decrease.

[case] patient *Xu*, female, 36, worker. She began to have dysphagia from March of 1973, and barium meal test of 101 hospital revealed 3cm of filling defect and was diagnosed as esophageal media cancer which was also confirmed by Shanghai tumor hospital. Chenkwangmycin was used for 10 times (150mg) and was stopped due to WBC decrease. She came to our hospital for barium meal test in June, 1973. The filling defect was still 3 cm and the edge was rough and irregular. She was prescribed *ban mao*, one *ban mao* a day. After taking for ten days, the symptoms were improved and she can ate one bowl of rice. After two months, she could 200g of rice every time. Reexamination of barium meal on 5th, September, 1973, revealed that the focus was shallow, edge was smooth and level and the barium could pass successfully. Examination on 13th, September, 1973: urine and stool routine test were normal, Nonprotein nitrogen were normal (26.7 mg), ESR was 11mm/hour, and weight increased 1.5kg. She continued to take *ban mao*. Chemotherapy was also used in 1974. X ray on 21th, March, 1974, revealed that rigidity sensation when barium passed the middle section of esophagus where bronchus passes, no filling defect and esophagus cavity. The disease was improved obviously and weight increased 15kg.

Comment: it is confirmed by experiments that *ban mao* has powerful anticancer action. “*ben jing*” considers that it can eliminate dead muscle, and “*ben cao tu suo*” says that it can attack blood stagnation and tumor. Perhaps

these functions refer to anticancer action. Contemporary doctors use it to treat cancers such as esophageal cancer and so on, receiving good effect. It is worthy further study.

3) Persistent chronic hepatitis: *qin gan pian*, a new drug for persistent chronic hepatitis contains alcohol extraction of residue which cantharidin has been extracted 0.2g, *qing dai* 0.05g, *bai ji* 0.05g, Aluminum hydroxide 0.05g, Magnesium Trisilicate 0.05g every tablet. Two tablets are taken every time, three times a day. 14 days compose one course of treatment. The drugs stop to be taken if the therapeutic effect comes up after three courses of treatment. The drugs continue to be taken for another three months if it takes effect. The side effect is little. Only some patients feel stomachache with a feeling of burning, dry mouth and hematuria which can be self-cured.

Hospitals such as Shanghai huashan hospital ④ use the drug to treat 232 cases of persistent chronic hepatitis, confirming that it can promote liver function, especially flocculation-turbidity test and serum proteinogram. All the cases are treated by herbals such as *chui peng cao*, *tian ji huang*, *ban lan ge*, *pu gong*, etc., and western medicines such as *gan ning*, CoA, glucurolactone, VitB12, etc. without effect. Result: 80 cases of obvious effective, 87 cases of effective, 71.9% of total effective rate.

Comment: this is a good example of combination of herbs and western medicine. *Ban mao* is used to disperse stasis, eliminate tumor and resolve toxin. Other herbs and western medicine are used to reduce its side effect. It is good for patients' continuous administration.

4) Bone tuberculosis: in the light of the theory that kidney dominates bone and liver dominates tendon, Shanghai zhabei district hospital⑤ *gu lao san*, *ban mao dan*, *su jue dan*, etc., to treat 40 cases of bone tuberculosis, receiving obvious therapeutic effect. *Gu lao san* mainly supplement *qi* and blood of liver and kidney, and so soothe tendon, activate collateral and attack tuberculosis. (1) *gu lao tang*: *da sheng di* 30g, *lv cao* 30g, *dang shen* 12g, *huang qi* 12g, *gou ji* 15g, *chuan duan* 15g, *dang gui* 9g, *niu xi* 9g, *hong zhao* 5. *Lu jiao jiao* 9g and *bai jie zi* 4.5g are added for *yang* deficient symptoms, *qiang huo* 9g and *du huo* 9g for back pain, *zhi ru xiang* 6g and *zhi mo yao* 6g for severe pain, *can sha* 30g, *luo shi teng* 30g and *xuan mu gua* 9g for paraplegia (named *gu lao qi fei tang*), dried *di long* 9g and one *wu gong* are grinded into powder for swallowing for leg tic. (2) *ban mao dan*: seven *ban mao* are put into a chicken egg and steamed. The *ban mao* is removed and egg is ate, one egg a day. 30 to 40 eggs can be taken continuously. The patients with kidney or urine tract diseases are not allowed to take. The drug must stop to be taken quickly if hematuria, urine pain, frequent urine or unsmooth discharge of urine comes up during the period of taking drug. (3) *xu jue dan*: *song xiang* 5kg, *sang zhi tang* 2.5kg. After *sang zhi tan* is put into gauze bag, *sang zhi tan* and *song xiang* are decocted by water. They are stirred until *song xiang* is dissolved (the time is about one day). Then cold water is added to make *song xiang* sink into bottom. *Sang zi tan* is removed,

and *song xiang* is grinded into powder. 0.6g to 1.5g is taken every time, twice a day. If there is no side effect when 0.6g is taken at first, the drug is taken continuously. It must stop to be taken if the some patients have rashes. It is effective to tendon and bone pain or longy fistula. Therapeutic effect: 40 cases are treated, among which 19 cases is cured (symptoms disappear and X ray shows the focus is steady.), 19 cases receive therapeutic effect (symptoms are improved, X ray shows no development of focus.), and 2 cases receive no therapeutic effect (the symptoms are severe and X ray shows development of the focus.).

[case] patient *Qiu*, female, 37. She suffered thoracic vertebra tuberculosis accompanied with paraplegia. Cold abscess came up. She received surgery, but paraplegia was not cured and spindle-shaped shadow of abscess remained beside spine. She came to our hospital in October of 1971, and was prescribed *ban mao dan* and *gu lao qi fei tang*. Symptoms of paraplegia disappeared and X ray showed steady focus and abscess reduced until February of 1972. Now she had recovered.

5) Rheumatic pain: external use of *ban mao* powder can relieve pain. We once used it to treat rheumatic pain, receiving extreme good effect. But we did not persist in applying because of pigmentation or scar of vesiculation. Doctor *Jin Huisheng* ⑥ uses *ban mao dan jiu* to treat more than 1000 cases of rheumatic pain and other diseases, receiving certain therapeutic effect. There is no scar, only temporary pigmentation. It is better than former one and is worthy studying and popularizing. (1) method: *ban mao* 12.5g (the whole body is dried in the shade. The head, feet and wings do not need to be removed.) and *xiong huang* 2 to 4g are grinded into powder and made into small pellets with 2cm of diameter with proper dose of honey. The pellets are pressed into round and flat shape. (2) moxibustion: when acupoints are selected, one *ban mao dan* is put on the acupoint and stick by adhesive plaster. It is removed after 6 to 24 hours (the time is shortened for children and tender skin, and time is prolonged for rough and thin skin.). Local blister as large as mung bean comes up after *ban mao dan* is removed. The blister would be absorbed after 5 to 7 days, leaving temporary pigmentation without scar. As for the patients with large area of pain, 3 to 5 *ban mao dan* can be used 2cm away around the selected acupoint, forming plum-blossom moxibustion. Additionally, moxibustion on ear acupoits also can be used. The pellets are smaller and are stick to relative reaction areas. (3) number of times: usually it is 1 to 3 times or 3 to 5 times. The interval is 5 to 7 days. Different acupoits receive moxibustion in turn. The drug takes effect by several times. This therapeutic is given up if no therapeutic effect comes up by many times. (4) result: more than 1000 cases are treatment, and 803 cases are followed up. The effective rate is 85.4%. Symptoms of 213 cases disappear, symptoms of 274 cases are improved obviously, symptoms of 199 cases are relieved, and symptoms of 117 are not improved. The diseases include rheumatic pain of limbs and shoulder, strain of lumbar muscles, sprain, rheumatic pain of back

and waist, intercostal neuralgia, head neuralgia, facial paralysis, inflammation of tendon sheath and ligament, etc.. In one word, *ban mao dan* moxibustion is effective to the all indications of block therapy of pain, and the effect is even better and longer than block therapy. (5) cautions: it should be careful when it is made because *ban mao* is toxic. *Ban mao ban* is not too large and the interval is not too short, avoiding big blister which inosculate from small blisters. Treatment must be applied in time when blister is broken or there is infection.

According the opinion of shenhe district first people's hospital of *shenyang* city, the mechanism is that *ban mao* is a kind of drug of skin irritation, and external use can stimulate skin directly to expand vessels, increase permeability, and then skin congestion, plasma effusion and blister form. Components of the drugs maybe seep into blister and became a kind of long stimulator, stimulating acroteric receptors, acting on nerve center by nerve reflex and then making allergic response recover. Therefore, analgesia action comes up.

6) Enlarged lymph node: *luo lei hei zhui wan* (formula of doctor *Zhang Zhikang*): *ban mao* 3g, glutinous rice (stir-baked) 27g. They are grinded into powder, and made into pills with decoction of *xia ku cao* 60g as large as mung bean. 1 to 2 pills are taken every time, once a day. Enlarged lymph nodes can be eliminated after taking for 15 to 30 days.

Or 250g of *sheng ban mao* and 500g of *sheng shan jia pian* are grinded into powder and made into pills with glutinous rice as large as *jie zi*. *Zhu sha* is used as shell for unperforated nodes, and *gan cao* for perforated nodes. One pill is taken a day. It can not be taken more then one pill, other wise, dysuria would come up. Application confirms it is effective.

7) Headache of encephalitis sequelae: headache of encephalitis sequelae is obstinate sometimes. Shenyang infection hospital uses *kou yao* to treat it effectively. The formual is *ban mao* 30g, *hong niang* 30g, *bai zhi* 30g, *shan zhi* 30g, *ba dou* 45g, *yin zhu* 21g, *xin shi* 15g, *xiong huang* 15g, *qing fen* 9g, *bing pian* 3g. They are grinded into powder and mixed with proper dose of honey. Domed pill with 0.5cm of diameter is used to cover two *tai yang* acupoints once a day. They are removed when patient feel pain and burning hot.

8) Psoriasis: *ban mao* 20, *wu gong* 10, *tu jin pi* 30g. They are grinded into powder and soaked into proper dose of wine for one week. It is used to cover the focus once or twice a day, expelling wind, clearing heat, killing parasite. Continuous administration can take effect.

Mabu medical center of Xiajiang county uses home-made formula whose main drug is *ban mao* to treat 34 cases of severe systemic psoriasis (for 20 to 30 days). They are all cured. The longest time for reoccurrence is two year. The short-term effect has exceeded dimethyl sulfoxide. No.1 formula: *ban mao* and *gan sui* are grinded into powder with the same dose. They are sieved for 100 times and mixed with water to cover the focus. No.2 formula: *chang ye donglv gen pi* are soaked into vinegar for three days and filtered by

gauze. The solution is used to wipe the focus. The focus is rubbed at the same time. No.1 formula is enough for mild case, and No.1 and No.2 formulas are used in turn for severe systemic psoriasis.

Dermatological department of Bangbu third people's hospital uses solution that *ban mo 10* is soaked in 1000ml of 10% glacial acetic acid for one week to wipe the focus. It is also effective to psoriasis.

9) Neurodermitis: it is an obstinate skin itch syndrome, and is relative to spirit factors. It can be subdivided into heat-dampness type and wind-heat type. (1) heat-dampness type is mainly treated by clearing heat and eliminating dampness. *Ban mao 10, sheng ban xia 12g, sheng nan xing 12g, tu jin pi 12* are soaked into 200g of wine. 100g of wine is added after ten days. The residue is removed and the solution is filtered. The solution is used to cover the focus four to six times a day. (2) wind-heat type is mainly treated by expelling wind, clearing heat, attacking toxin and killing parasite. *Ban mao 7, tu jin pi 6g, qing fen 1.5g, da feng zi 7* (without shell) are grinded into powder and mixed with water. It is used to cover the focus once a day. The drug is quite stimulant. If it causes local blisters, they can be punctured can covered by gentian violet topical solution.

Doctor Zhang Zhenming ⑦ uses 15% *ban mao* tincture to treat neurodermitis. The method is simple. (1) drug preparation: 15g of *ban mao* is grinded into powder, soaked into 100ml of 75% alcohol for 6 to 7 day, and then filtered. The solution is 15% *ban mao* tincture. They are stored in bottle. (2) treatment method: after routine sterilized, 0.25% procaine is used for block therapy. 15% *ban mao* tincture is dipped by cotton swab to wipe the focus. The blisters come up after 20 minutes to 2 hours. Under the condition of asepsis, blisters are punctured by sterilized needle, covered by 1% gentian violet topical solution and covered by gauze. Scab forms after two days, and scab drops and wound heals up after 5 to 8 days. If there still are lichenoid changes or small rashes, the therapy can be used again after two to three days until it is cured. *Ban mao* tincture alone is also effective to small area of focus, so Block therapy can not be used. (3) cautions: *Ban mao* tincture must not be used for normal skin so as to avoid unnecessary pain. Aseptic technique is applied in order to prevent infection. Many focuses can be treated in batches. (4) therapeutic effect: 28 cases are treated, among which 26 cases are cured and 2 cases are improved obviously. 19 cases are cured by one time, 6 cases are cured by two times, and 3 cases are cured by three times or more. The effect is relative low for much focuses and large area.

10) Vulva white spots: it refers to local or diffuse white pathogenic change in vulva, manifesting as itch or pain of vulva, white spots in skin, dryness, cornification, loss of elastic fibrous tissue and skin chaps sometimes. The changes can develop to perineum and crissum in severe case. It can develop into vulva cancer. Therefore, it should be treated actively.

Bai ban gao invented by some hospital is quite effective. After being treated by the drug, itch is relieved gradually, cornification become thin, the skin color

changes into pink from white, pigmentation and elastic tissue recovers, and atrophied labia and clitoris become normal in some cases. 11 cases are cured, among which 4 cases are cured, 7 cases are improved, and the total rate is 100%. The shortest time is two months, and the longest one is 2 years. Method: *bai ban gao* is applied for local external use, three times to four times a day. The drug is suitable to wipe thin. Herb steam is used first for inflammatory and chaps. After it is improved, *bai ban gao* is used. Formula for washing focus: *she chuang zi 15g, tu fu ling 15g, bai xian pi 15g, xu chang qin 15g* (the effect would be better if *ku shen 15g, di fu zi 15g* are added.). *bai ban gao*: *ban mao 0.3g, mi tuo seng 30g, liu huang 12g, qing fen 12g, xiong huang 9g, bing pian 9g, ku fan 9g, pi shi 30g, vinegar 500g*. The drugs are grinded into powder and made into *gao* with vinegar for external use. Oral administration: *liu wei di huang wan* is modified according to systemic condition and quantity of vaginal secretion. It also is not used without special condition.

Ban mao can stimulate skin, promote local blood circulation, improve local neurotropy, and increase pigmentation. The dose is small, but the function is powerful.

11) *E zhang feng*: it includes fungal infection of nail and hand, chaps (physical dermatitis), pompholyx, Keratolysis Exfoliativa, palmoplantar keratoderma, etc.. The development is relative to season. Chaps, palmoplantar keratoderma and Keratolysis Exfoliativa usually are severe in winter and mild in summer, while fungal infection of nail and hand, pompholyx usually are severe in summer and mild in winter. The pathogenic factors are heat-dampness in spleen and stomach, blood deficiency generating wind and failure to nourish skin, palm and feet. Western medicine considers that they are caused by fungal infection, allergic reaction, physical factor and shortage of VitA. They are obstinate and are not easy to be cured. Zhuqiao community hospital of Nanhui county, et al, ® use *e zhang feng jin ji* to treat 3000 cases. Clinical observation and family follow-up confirm its effect. Except pompholyx and palmoplantar keratoderma, cured rate is 91.1% of chaps, 80.2% of fungal infection of hand, 76.9% of fungal infection of feet, and 62.3% of Keratolysis Exfoliativa. The effect is good, stimulation is small and the therapy does not affect work. The formula is *ban mao 1g, wu gong 2, bai guo zhang 9g, bai ji 9g, chuan jun 9g, tu jin pi 9g, ma qian zi 9g, bai xin 6g*. They are soaked into 1kg of vinegar for 12 hours. Hand or foot is put into the solution for 20 minutes a day. 15 days compose one course of treatment. The time can be prolonged for fungal infection of nail. Caution: it must not be used for oral administration.

12) Malaria: *ban mo* powder and *bai jie zi* as large as rice are put on adhesive plaster, which is stick to third thoracic vertebra three hours before the outbreak of malaria. It is removed after four hours later, and extreme effective to malaria.

13) Obstructive jaundice, deep abscess, enlarged lymph node: *huo xue ku xiao san*: *ban mo 100* (about 15g, feet are removed.), *pi xiao 18g, dong dan*

18g. They are grinded into powder and stored in bottle. *Jia wei ding gui san*: *ding xiang* 60g, *rou gui* 60g, *gan song* 60g, *shan nai* 30g, *hong hua* 30g. They are grinded into powder and stored in bottle. After *huo xue ku xiao san* is put on adhesive plaster, *jie wei ding gui san* (therapeutic effect would be better if small dose of *yun cun* is add) is put above *huo xue ku xiao san*. Then the adhesive plaster is used to cover the focus. It is used for all kinds of swelling node such as *yin* furuncle, and deep abscess and enlarged lymph node whose *yin* symptoms such as diffuse swelling, normal skin color and hardness. The drugs are changed once every three days until the diseases are cured. *Huo xue ku xiao san* can not touch the skin directly because it can cause blister. Surgery department of our hospital once used it, and the effect is quite good.

[case] patient *Zhou*, male, 52, cadre. There was a swelling node in the right neck for more than one year, as large as duck egg and as hard as stone. It was unmovable and skin color was normal. He once was treated by penicillin, streptomycin and other drugs for oral administration and external use without therapeutic effect. He came to our hospital and was diagnosed as *shang shi ju*. He was prescribed *huo xue ku xiao san* for external use and drugs of soothing liver and softening hardness for oral administration. After half month, the swelling node became small and soft. After more than two months, the swelling node disappeared by 10 pieces of *huo xue ku xiao san*.

14) antral gastritis, atrophic gastritis, peptic ulcer, prolapse of gastric mucosa: they can be treated by modified *chou dao san* of *jin kui yi*. *Gao liang jiang* 150g (it is stir-baked with *ban mao* 25 until the hair of *ban mao* become black. Then *ban mo* is removed.), *rou gui* 60g, *sheng da huang* 30 and, *gan cao* 30 are grinded into powder and put into capsules. 4 to 8 capsules are taken before meal every time, three times a day.

Comment: *gao liang jiang* can warm stomach, remove coldness, supplement spleen, promote digestion, promote the secretion of digestive juice, improve blood circulation of stomach wall, relieve spasm, pain and vomiting, and promote recovery. *Ban mao* is stir-baked with *gan liang jiang*, and removed later, thus its function of activating blood and dispersing stasis is acquired, but healthy *qi* would not injured. It is great value of processing. *Rou gui* is pungent and heat, while *da huang* is bitter and cold. They can regulate the stomach. The compatibility of drugs is wonderful. *Zhu Buxian*, a doctor of *taixing* county, uses it and receives effect every time. It is worthy popularizing. It should be careful when the patient has obvious *yin* deficiency symptoms with red or purple tongue or hemorrhage tendency.

[case] patient *Yang*, female, 47, doctor. She suffered gastric disease when she was 20 years old. It did not cured by many medicines and became severe day by day. The manifestations were gastric secret anguish, distention and depression of chest and hypochondrium, vomiting with much acid water. She took 6 tablets of soda before every meal. The stool was extreme dry. Barium meal of *taizhou* people's hospital on 14th, May, 1973, revealed hook-like

stomach, media position and tension, good squirm, thick antral gastric mucosa, perhaps a fixed barium pot as large as soybean in lesser curvature of stomach near sinus ventriculi, no filling defect, umbrella-like change of duodenal ampulla. The diagnoses were antral gastritis complicated with superficial ulcer and prolapse of gastric mucosa. She was suggested to receive surgery, but she wanted to receive nonsurgical therapy for some time. Because of longy duration, modified *chou dao san* was used to warm middle *jiao*, disperse stasis, promote digestion and remove stagnation. 4g is taken before meal every time, three times a day. The disease was improved and she did not need to take soda. Continuous administration made disease steady and did not take any side effect. Reexamination in *taizhou* people's hospital on 21th, June, 1975, revealed hook-like stomach, no abnormal retention of stomach liquid, media position and tension, good squirm, thick and frizzy change of antral gastric mucosa, smooth lesser curvature of stomach, no filling defect and cavity, trigonal filling of duodenal ampulla, media position of pyloric canal without thin mucosa. The diagnosis was antral gastritis (milder than that on 14th, May, 1973.). Superficial ulcer and prolapse of gastric mucosa were cured. There was no reoccurrence until 1977.

15) Alopecia: *ban mao* 5, *nao yang hua* 9g, *mao jiang* 9g are soaked into 150g of Kaoliang spirit for half month. The solution is used to wipe the focus three times to four times a day. The limited degree is that the skin is not broken. It can promote hair growth gradually.

1\ Hycroxycantharidin, Tianjin Medicine Journal 8:43, 1977

2\ Cantharidin, Chinese Medical Journal 7:503, 1975

3\ *ban mao dan* on terminal stage of esophageal cancer assisted by chemotherapy, Wuxi Medicine Journal, 5, 1975

4\ *qian gan pian*, a new drug for persistent chronic hepatitis, Chinese Medical Journal 1:30, 1974

5\ herbs on 40 cases of bone tuberculosis, Clinical Date Compile of Achievements Exhibition of Combination of TCM and Western Medicine, page 39, 5, 1974

6\ *ban mao dan* moxibustion on rheumatic pain, New Medicine, 11, 549, 1975

7\ introduction of 15% *ban mao* tincture on 28 cases of neurodermatitis, New Medicine and Pharmacology Journal 8:18, 1974

8\ introduction of herb lixivium on 3000 cases of *e zhang feng*, Clinical Date Compile of Achievements Exhibition of Combination of TCM and Western Medicine, page 235, 1974

16 Chan Su (subsidiary drugs: *chan chu*, *chan pi*)

Chan chu is whole body of *Bufo bufo gargarizans* Cantor and *B. melanostictus* Schneider. Its popularized name is *lai ha ma*. White serum secreted by parotid gland and glandula integumentaria are collected and made into *chan su*. The skin is called *gan su pi*. They are all used as drugs. It is produced by many places, mainly in Jiangsu, Shandong and Hebei provinces. It is warm in nature, pungent and sweet in flavor, toxic and

attributive stomach meridian.

Functions of *chan su* are 1) resolving toxin, eliminating carbuncle, 2) avoiding factors, dredging orifices, 3) treating malnutrition, and stopping pain. It is effective to *yin* furuncle, severe ulcer, furuncle, back carbuncle, swelling and rot of throat, malnutrition, toothache, coma of eruptive diseases, etc.. These prepared drugs are mainly composed of *chan su*, such as famous *liu shen wan*, *chan su wan* for eliminating ulcer and drawing toxin, *mie hua dian she dan* for activating blood, eliminating swelling, resolving toxin and clearing fire, etc.. In the recent years, it is found that *chan su* can inhibit cancer in tissue culture and tumor in animal models. Clinical application also confirms its anticancer action. “*ben cao gang mu*” says, it can treat all kinds of severe swelling. Perhaps it just refers to its anticancer action.

The complement of *chan su* is complex, and bufalin and bufotoxin are main complements. Bufotoxin is hydrolyzed into bufalin, suberic acid and arginine. It also contains catecholamine, cholesterol, etc.. Pharmacologic research: 1) bufalin and bufotoxin can strengthen heart, enhance the contraction and extension and reduce heart rate. Bufalin is more powerful and nearly the same as digitoxin. Bufalin also has anaesthesia action and can cause convulsion and vomiting. 2) bufotoxin can excite respiratory and increase blood pressure. Experiments confirm that bufotoxin excites respiratory through center, and the mechanism of increasing blood pressure is complex. 3) *chan su* has local anaesthesia and analgesic actions. 4) *chan su* can stop asthma and cough maybe through stopping spasm of bronchus and antiallergenic action. 5) *chan su* has anti-inflammatory, anticancer and radioresistance actions.

In the light of pharmacologic actions, *chan su* is used to treat chronic nephritis, meningitis, tonsillitis, furuncle, lung tuberculosis, bone tuberculosis, etc.. *Chan su* injection made by Jiangsu xuyi pharmaceutical company has antibacterial, anti-inflammatory, anti-tuberculosis, anticancer, increasing-WBC and radioresistance actions. The good effect has been confirmed by relative hospitals. It is worthy further study.

The drug is toxin, so the dose must be controlled strictly. It usually is made into pill, and the dose for one day is 15mg to 30mg. pregnant women are not allowed to take it because it can make uterus contract. Proper dose is applied for external use. If venom secreted by *chan chu* goes into eyes, decoction of *zi cao* can be used to wash the eyes. Overdose of oral administration can be treated according to first-aid principle of cardiac heterosides poisoning. The clinical applications are:

1) Heart failure: xiyuan hospital^① of TCM research institute uses *qiang xin san* (one portion of *chan su* and nine portions of *fu ling*) to treat 30 cases of heart failure, with 12 cases of obvious effect, 14 cases of effect, and 4 cases are failed. The total effective rate is 86.7%. 19 cases receive ECG before and after treatment, among which 5 cases have no changes, 1 case has dubious change and 13 cases have changes. ECG of 5 cases are improved obviously,

and the figures of myocarditis, myocardium injury, coronary insufficiency and ventricular hypertrophy. ECG of 4 cases is improved, including decrease of heart rate and disappearance of auricular paroxysmal tachycardia. ST-T change of 5 cases is considered to be relative to *chan su*. They think that dose of *qiang xin san* is 300mg (containing *chan su* 30mg) at least everyday. The forms are capsule, enteric-coated tablet and wax-coated pill so as to reduce gastrointestinal reactions. Additionally, doctor *Wang Xiexiu* also once used *chan chu* to treat 13 cases of heart failure. Except one case, symptoms and signs of other 12 cases were improved after using drugs for 2 to 48 hours. Heart rate was reduced, urine amount was increased, edema was eliminated and swelling liver was eliminated. Auricular fibrillation of one case disappeared. The dose is considered to be 4 to 8mg and twice to three times a day. These all are guidelines for clinical application.

Strengthening-heart action of *chan su* is relative to that it can increase cardiac protein kinase activity and does not infect protein kinase activity of other organs. It does not have extensive side effect like propranolol.

2) All kinds of toxic ulcer: *chan su* 3g, *mian fen* 6g and small dose of *zhu sha* are made into pills with well water as large as wheat seed. One pill is taken with shallot soap every day. It is cured after sweating. Three to four pills are taken for severe ulcer. (“*bao ming ji fang*”)

3) Carbuncle, beginning of toxic swelling. *Chan su* 100mg to 150mg, *guang jiao* 1 piece and one to two bowls of vinegar are put into pan to be melted. It is dipped by writing brush to cover to focus. (“*wan shi jia chao fang*”)

4) Tetanus: *chan su* 6g and powder of *quan xie* 15g and *tian ma* 15g are made into pills as large as mung bean (“*sheng hui fang*”). One to two pills are taken with Shaoxing wine every day. It can resolve toxin, relieve pain, expel wind and stop convulsion.

5) tonsillitis, throat carbuncle, diphtheria, carbuncle, furuncle: *liu shen wan* uses six drugs such as *chan su* to clear heat, resolve toxin, eliminate swelling, stop pain, strengthen heart, rescue spirit, stop spasm and tranquilize spirit. Besides tonsillitis, throat carbuncle, diphtheria, carbuncle and furuncle, it also can be used for: (1) heart or lung failure of febrile diseases: 10 to 20 pills every time, once per two to three hours. It is obvious effective. (2) outbreak of asthma: 10 pills. (3) it can relieve pain of cancer. *Mu cun* et al research ② *liu shen wan* and crude drugs on blood pressure, finding that function of increasing blood pressure depends on *chan su* because the mechanism of stimulate on vagus nerve and ganglion and direct effect on heart, and that Chinese *liu shen wan* can resolve toxin, stop pain and diminish inflammation while Japanese use its strengthening-heart function. Experimental researches show that effects of *liu shen wan* on coronary blood amount, smooth muscle of coronary vessel, heart contraction and papillary muscle mainly depends on *chan chu*, while *niu huang*, *she xiang* and *zhu sha* only take synergistic effect. The whole functions of these four drugs are main part of whole actions of *liu shen wan* at least, and the combination use achieves selective reaction on

heart.

6) Osteomyelitis: fistula of bone tuberculosis: 50mg to 100mg (gradually increased from 10mg) of *chan su pian* or *chan su jiao nang* are taken every time, three times a day. *Yang he tang* is used at the same time for oral administration for *yang* deficiency.

7) Superficial anaesthesia: *chan su* has powerful function of superficial anaesthesia. “*yi zong jin jian· wai ke xin fa*” of Qing Dynasty had already used it in *wai fu ma yao*. In the recent ten years, many hospitals modify the formula for mucosa anaesthesia in five-organ surgery. It can last for about one hour. The surgery can begin after using drug for ten minutes. Japanese doctor *Gang tian* and *Shi yuan* ③ observe the anaesthesia action of bufalin. The standard is the disappearance of wink. Local anaesthesia action of *chan chu ling* is quite powerful without local stimulate, is 30 to 60 times of cocaine and 300 to 600 times of procaine. The similar therapeutic effect has been achieved in human, confirming its powerful, convenient and safe action.

The formula of *wai fu ma yao* is *chan chu 9g, chuan wu 9g, cao wu 9g, hu jiao 6g, bo he nao 6g, yang jin hua 15g*. They are grinded into powder and then put into 1000ml of 30% alcohol. It is stirred once a day. The clear solution in upper layer is used after one week. As for throat test, solution is spread throat. As for tonsillectomy, the solution is dipped by cotton swab to cover tonsil and area around tonsil. As for nose and mouth cavity surgery, the solution is dipped by cotton swab to cover the area for surgery. It analgesia action is quite good, and the surgery can begin after ten minutes. It should careful that the dose should not too large and the solution can be swallowed and put into eyes, some patients have local stimulate reactions such as sneeze and increased quantity of pharyngeal secretion.

8) Stomach, colon and rectum cancer: affiliated hospital of *Qingdao* medical university makes *qi ning qi hao fang*: *chan su 9g, e wei 24g, ru xiang 24g, mo yao 24g, huang yao zi 24g, feng fang 18g, sheng dai mao 18g, ji nei jin 45g, tian xian teng 30g, yan hu 30g, gan cao 15g, san leng 15g, e zhu 15g, zhu sha 12, mu bie zi 12g* (without shell). They are grinded into powder and made into pills as large as phoenix tree with honey, 5 pills a day, twice to three times a day. It can relieve clinical symptoms of the cancers mentioned above and prolong life. Few cases are cured.

9) Cervical, vagina and rectum cancer: early and media stage of these cancers are mainly treated by surgery, assisted by chemotherapy and herbs. Terminal patients are usually treated by chemotherapy and herbs. The followed formula ④ has certain effect for external use. *Er cha 5.5g, ru xiang 0.6g, mo yao 0.6g, xue jie 4.5g, bing pian 7.5g, she chuang zi 2g, qing fen 3g, chan su 0.6g, san xian dan 6g, xiong huang 6g* and *bai fan 270g* are grinded into powder. After *bai fan* is dissolved by water, other drugs are added and then made into tablet as large as coin. One tablet is put on the focus, changed every two to three days.

10) Furuncle, back carbuncle, mastitis, and other severe ulcer: doctor *Chen*

Gongshi uses *chan su wan*, a famous formula whose main drug is *chan su* in “*wai ke zheng zong*”, to treat furuncle, back carbuncle, mastitis, and other severe ulcer. The functions of resolving toxin, relieving pain, draw rot and eliminating swelling are powerful. The formula is *chan su 6g, xiong huang 6g, qing fen 3g, tonglv 3g, ku fan 3g, duan han shui shi 3g, dan fan 3g, ru xiang 3g, mo yao 3g, she xiang 3g, zhu sha 9g, wo niu 21*. *Wo niu* is pounded and mixed with powder of *chan su*, and then powder of other drugs are mixed. They are made into pills as large as mung bean, three pills every time, once to twice a day. After *cong bai 5cun* is pounded, pills are put in, and then taken with hot Shaoxing wine. The patient is covered quilt by to sweat. Pregnant women are not allowed to take. It should be careful when it is used for weak patient.

The pills can draw rot and soften hardness, so they can be made into drug strip to put into the open part of a sore or made into biscuit to cover the sore.

11) Toothache due to wind-fire or decayed tooth: one to two pills of *ya tong yi li wan* (*chan chu 30%, xiong huang 30%, gan cao 29%, peng sha 20%*. They are grinded into powder and sieved for 140 times, then made into pills as large as vegetable seeds.) is used to fill focus and plugged by cotton ball to prevent dropping. It is quickly effective to toothache due to wind-fire or decayed tooth.

Subsidiary Drugs: *Chan Chu*

Chan chu is pungent in flavor, cold in nature and toxic. It can eliminate stagnation and mass, resolve toxin and ulcer. Doctor *Miao Xiyong* considers it as an important drug for infantile malnutrition. It is suitable for oral administration and external use. It can draw factors out and attack internal factors.

In the recent years, it takes certain effect on tumor, liver cirrhosis, lung tuberculosis, leukemia, etc..

It is toxic, so it can be taken with heavy dose. *Chan chu* is dried after the organs are removed, and made into pills or powder. The dose for one day is 1.5g to 3g. It is made into injection in the recent years, making application convenient and promoting therapeutic effect. One to two live *chan chu* is used for one day. The dose can be added if the patients do not vomit. It should be careful when it is used for pregnant women. Toxic reaction and rescue method are discussed in the end of this section. The clinical applications are:

1) Acute granulocytic leukemia: in light of the folk experience of using *chan chu* for leukemia, internal medicine department of *Ruijin* affiliated hospital of Shanghai second medical university[®] uses *chan chu fu fang* to treat acute granulocytic leukemia assisted by chemotherapy. The effect is better than chemotherapy alone.

The formula is live *chan chu* (without organs) 2 to 4, (or *gan shu pi 9 to 12g*), *ban zhi lian 30g*, *ban lan gen 30g*, *tu da huang 30g*, *bai ying 30g*, *qi ye yi zhi hua 15g*, *zi cao 15g*, *she gan 9g*, decoction, one dose a day.

The formula is modified according syndrome differentiation. *Huang jing 30g*,

huang qi 15g, shu di 15g, dang shen 9g, dang gui 9g are added for *qi* and blood deficiency; *han lian cao 30g, da ji 15g, xiao ji 15g, dan pi 9g, guang xi jiao fen 3 to 9g* for hemorrhage, *pu gong ying 30, da qing ye 30g, zi di ding 15g, jin yin hua 15g* for fever and infection, *sheng shi gao 30g* for high fever.

Chemotherapy: 6-mercaptopurine (6-MP) 2-3mg/day/kg, taken by three times; prednisone 20-30mg/day, taken by four times, or replace by other steroid hormones with corresponding dose. It is taken until it takes obvious therapeutic effect according to hemogram.

Therapeutic effect: according to the standards made by Shanghai leukemia group in 1972, the results are listed as follows.

group	cases	Effective rate	Complete remission	Average remission time	Longest remission time
<i>Chan chu fu fang</i> and chemotherapy	60 (male 45, female 15)	50%	28.33%	4.2 months	8.5 months
Chemotherapy alone	43 (male 30, female 13)	12.24%	5.275	2.5 months	4 months
group	Survive time >6 months	Survive time > 1 year	Survive time > 2 years	Average Survive time	Longest Survive time
<i>Chan chu fu fang</i> and chemotherapy	18 case	5 cases	2 cases	7.1 months	29 months
Chemotherapy alone	1 cases	none	none	2.1 months	7 months

Through clinical observation, acute leukemia in early stage usually belongs to excessive syndrome and heat syndrome. Therefore, drugs for clearing heat, cooling blood and resolving toxin are selected. Because *chan chu fu fang* contains *chan chu*, some patients would feel nausea or vomit. They can be relieved by treatment according to symptoms.

2) Esophageal cancer, cardia cancer: lin county esophageal cancer prevention and treatment group of He'nan province introduces two formulas, which are effective to esophageal cancer, cardia cancer. Formula I: *bai pi 20g, san qi 100g, shan yao 200g*. They are grinded into powder and made into pills with water as large as mung bean, 3 pills every time, three times a day. Formula II: *chan chu fen 500g* (without organs, baked and grinded into powder), *zhu sha 250g, peng sha 250g, ku fan 50g, xuan shen 50g, hei dou 75g*. They are grinded into powder and made into pills with water as large as mung bean, 10 pills every time, three times a day. Result: formula I and II are

used together to treat more than 300 cases of esophageal cancer and cardia cancer. 230 cases are followed up, and most of them is effectively treated.

3) Ascites and edema of live cirrhosis and chronic nephritis: *xie shui mi* is suitable for ascites and edema of portal cirrhosis and chronic nephritis: after drug is used, urine amount increases and edema bates. The formula is big *chan chu* 1 (or two small ones) and *sha ren* 9g. *Sha ren* is put into abdomen of *chan chu*, mixed with sesame oil 120g and honey 120g, decocted into plaster form. Iron pan is not suitable, but aluminium or cuprum pan is good. 6 to 30g is taken every time, twice to three times a day. One week composes one course of treatment. It is warmed before taking. Pregnant women are allowed to take.

[case] patient *Wang*, male, 46, farmer. He suffered non-jaundice hepatitis two years ago. The abnormal liver function was improved after treatment. But swelling liver still extended ribs for 2cm and swelling spleen extended ribs for 1 cm with media texture. In the recent half year, he has poor appetite, fatigue, thin body, abdomen distention, little urine, increasing bid abdomen. PE: slight yellow sclera, 92 cm of abdominal perimeter, enlarged abdomen veins, non-touch of liver and spleen, four spider nevus and liver palm. Liver function is abnormal. Barium meal showed varicose vein of esophagus. The coating was thin and greasy, and the pulse was thin and wiry. It was due to liver blood stasis, *qi* stagnation, dampness obstruction and stagnation of water. It was live cirrhosis decompensation, and belongs to severe *gu zhang*. *Xie shui mi* was prescribed to eliminate water and relieve distention. Urine amount increased and big abdomen was a little smaller after taking drug for two days. They were obviously improved after taking drug for three days. Big abdomen was nearly eliminated after taking drug for seven days. Later, dispersing stasis, softening hardness, regulating liver and supplementing spleen are applied for continuous treatment.

4) Lver cirrhosis and infantile malnutrition: *chan sha san* of "*jiang nang zuo yao*" can supplement spleen, eliminate distention, treat malnutrition and eliminate stagnation, effective to big abdomen of liver cirrhosis and infantile malnutrition. It is not suitable for *yin* deficiency. Powder of *sha ren* with proper dose is put into the mouth of one big *cha chu*. After the mouth is sealed by thread, *chan chu* is covered by earth and calcined. When it is cool, the earth is removed and *chan chu* is grinded into powder. It is taken by three times. The dose seems too heavy, 1.5g to 2.5g is proper, once to twice a day. The dose can increase if the patient has no side reactions.

5) Lichen urticatus: it is common seen in children. Nantong city Chengqu hospital uses decoction of *chan chu* to wash the focus. 20 cases are treated, receiving good therapeutic effect. After organs are removed, 3 to 4 live *chan chu* are washed and put into jar to be decocted extremely. Residue is removed by filter. The soup is applied for external use. Drip washing is applied for the focus with much rash. The soup is dipped to wipe the focus with lesser rash. It is used three times to four times a day. The itch is stopped after using

the drug for one day. The all rash would be abated after using drug for three days to four days.

[case] patient *Zhao*, male, 4. He suffered lichen urticatus for more than one year. it was extreme itch. The disease was not cured by chlorpheniramine, Promethazin and prednisone for oral administration, and prednisone unguent for external use. Itch was stopped by using the method mentioned above once. The all rash was abated by three times. It had not reoccurred for 6 years.

6) Mumps: Gaoyou county pingshenggong community hekou medical center tadpoles of *chan chu* and *bing pian* to treat mumps. 500g of tadpoles and 3g of *bing pian* are put into bottle and sealed off. The tadpoles are dissolved after 3 to 4 days. The solution is filtered by gauze and added with proper dose of antiseptic. It is used to wipe the focus three to four times a day. The medical center treats 80 cases and received good effect. Usually the patient is cured after using drug for one to two days, three to four days for severe cases.

7) Eczema and infantile tinea: *chan chu* is burnt into ash and mixed with pig oil, and then used to cover the focus, once a day ("*qian jin fang*"). Or back of live *chan chu* is scraped by bamboo sheet, and is used to wipe the focus, three to four times a day. It is cured after two to three days. It can be referred.

8) Osteomyelitis: If it is not cured for long time with pus or dead bone coming from fistula, one big *chan chu*, a regiment of hair as large as chicken egg and 200g of pig oil are used. They are decocted and the residue is removed. They become plaster when they are cool. Decoction of *sang bai pi* and *wu tou* are used to wash and wipe the focus, powder of *duan long gu* is used to cover the edge of focus, and then the plaster is used to cover the focus.

9) Suppurative inflammatory, tumor: live *chan chu* is washed, put into boiling water and decocted until the meat is thoroughly cooked. After being filtered, the solution is concentrate into dryness. Then it is dried by fire and grinded into powder. The powder is put into capsules, and every capsule weights 0.5g. One capsule is taken after meal, twice to three times a day. It can diminish inflammation, resolve toxin, soften hardness and attack cancer.

10) Chronic bronchitis, cough due to consumed diseases, abscess, furuncle, skin itch, leprosy and cancer: seven *chan chu* (without organs) is decocted with water, and the solution is made into 150 injections with 2 ml. One injection is used for intramuscular injection. Ten days compose one course of treatment. It is effective to the diseases mentioned above, chronic bronchitis in particularly.

Additionally, heart of *chan chu* can treat bronchitis. After being washed by water, *chan chu* heart is mixed with refined white sugar or honey and boiled water. It is taken in the morning. 3 to 5 hearts is used for the children younger than 10 years old, 5 to 7 hearts for patients between 10 to 20 years old. The course of treatment usually is about 10 days, and 15 to 20 days for severe

cases.

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Toxic reactions and rescue method about eating *chan chu* by mistake

Doctor *Xue Kaixian* ⑥ estimates the domestic date, finding 31 cases poisoned by eating *chan chu*, 2 cases poisoned by taking *liu shen wan*. Among these 33 cases, the youngest one is 12 days old, and the oldest one is 57 years old. There are 21 cases of children younger than 15 years old. Except 3 cases die, others was cured after treatment.

The organs cause poisoning are muscle, head (including parotid gland), limbs, liver, ovary, eggs, etc.. Seeing from this, the toxin exists not only in skin gland, but also in others organs and tissues.

1) Toxic manifestations: they usually come up 30 to 60 minutes after eating, 2 hours sometimes. The manifestations which come up during eating or some minutes after eating usually are seen severe poisoning or young patient. Main manifestations are (1) digest system: upper gastric discomfort first, and then nausea and vomiting. The vomiting is caused by the stimulator on chemistry receptor of vomiting center. Some patients have abdominal pain and diarrhea. Sopping-vomiting method can not be used for the patient who has vomiting, because vomiting helps body to discharge the toxin. It is relative to prognosis. (2) nerve system: numbness of lip and limbs, dizziness, somnolence, and even come. (3) circulation system: palpitation, shock sometimes. Majority of patients have bradycardia, the rate usually is about 40 beats per minutes, and minority of patients would have 28 beats per minutes.

2) ECG: majority of patients have atrioventricular block or sinoatrial block. Usually it is considered to be caused by hyperactivity of vagus nerve, because these blocks cured by atropine for intravenous injection. It is necessary to treat this kind of arrhythmia in time, because they can result in heart and acute Adams syndrome if these arrhythmias develop.

3) treatment: (1) routine treatment principle: 0.2% to 0.5% potassium permanganate is used to wash stomach, 20 to 30g of bitter salt (MgSO₄) is used to promote catharsis. The patient is stimulated to vomit and given clyster if necessary. Fluid can supplemented for water loss, and large dose of VitB and Vitc are supplemented at the same time. (2) arrhythmias: 0.5 to 1g of atropine is used by intravenous injection for severe cases and by subcutaneous injection for mild cases, three to four times a day until arrhythmias disappear. (3) norepinephrine is used to maintain blood pressure for coma, nikethamide, caffeine and camphor are used for lung failure and circulation failure. Additionally, oxsorb can be used. (4) antibiotic is used to prevent infection.

Subsidiary Drugs: *Chan Pi*

Chan pi is pungent in flavor and cool in nature. It can eliminate stagnation and kill parasite by oral administration, and resolve toxin and eliminate swelling by external use. The dose usually is 4.5g to 9g for decoction, and

0.6g to 1.2g for pills. The clinical applications are:

1) Esophageal cancer: (1) lin county people's hospital of he'nan province makes 81 *pian* from powder of *chan pi* and *shan yao* with the same dose. Every tablet weights 0.5g, one tablet every time, twice a day. It is effective to esophageal cancer. (2) esophageal cancer in early stage: softening hardness, activating blood, promoting *qi* circulation, descending adverse flow of *qi*, attacking toxin and eliminating swelling are applied. The formula is *gan chan pi 9g, tao ren 9g, ju ye 9g, ju pi 9g, shi jian chuan 30g, qi ye yi zhi hua 30g, dan shen 18g, ji xing zi 12g*, decoction, one dose a day.

2) Gastric cancer in media stage⑦: clearing heat, resolving toxin, activating blood, dispersing stasis, promoting *qi* circulation and relieving pain are applied. The formula is *gan chan pi 12g, yuan hu suo 12g, chai hu 9g, zhi shi 9g, dang gui 9g, yu jin 9g, dang shen 9g, ban zhi lian 30g, chi shao 30g, she she cao 30g, jin gou ji 30g, wa leng zi 30g, ma qian zi pill 0.7g* (swallowed with the decoction), *tian long wan 65 pills* (swallowed alone), decoction, one dose a day.

3) Nasopharyngeal carcinoma: clearing heat, resolving toxin, softening hardness, eliminating stagnation are applied. The formula is *gan chan pi 9g, cang er zi 9g, pao shan jia 9g, xia ku cao 15g, shu yang quan, 15g, hai zao 15g, feng fang 12g, kun bu 12g, she liu gu 30g, shi jian chuan 30g*, decoction, one dose a day.

4) Cervical cancer in early stage: (1) clearing heat, resolving toxin, promoting *qi* circulation, breaking blood are applied. The formula is *gan chan pi 15g, feng wei cao 30g, e zhu 30g, shan cig u 9g*, decoction, one dose a day. (2) *zhabei* district *beizhan* hospital of Shanghai ⑧ uses decoction of *gan chan pi 15g, feng wei cao 30g, peng e zhu 30g* and *bing qiu zi 9g* to treat cervical cancer, receiving certain therapeutic effect.

5) Liver cancer, esophageal cancer, mediastinum tumor, granulocytic leukemia, lymphoma, spermatogenous cancer, collagenosis, lupus erythematosus and behcet disease: second pharmaceutical factory of Shanghai Medical Industry Company makes 6671 *pian* from *chan pi* to treat these diseases. *chan pi* is boiled in 100°C water for one minute, picked out, dried by fire, soaked into doubled dose of ethyl acetate for 24 hours and then made into tablets. Every tablet contains 0.2g of *chan pi* powder. 3 to 4 tablets are taken every time, three times a day. 43 cases are treated and observed by such hospitals as Shanghai dongxin hospital, bawu hospital, changhai hospital. They receive certain therapeutic effect, and some effect is quite good. The side effect is little. The drug is still under clinical observation.

6) Chronic heart failure: Shanghai yangpu district TCM hospital used *gan chan pi* and *wan nian qing* as main drugs to treat edema of chronic heart failure. They can supplement heart and promote urine powerfully, and abate edema obviously. 20 cases are treated, among which 4 cases are coronary disease, 10 cases are rheumatic heart disease, 3 cases are cor pulmonale, and 3 cases are hyperthyroid heart disease. All the cases have enlarged heart

and swelling liver confirmed by X ray and ultrasonic inspection. 7 cases have obvious edema (among which 4 cases are complicated ascites), and 7 cases have auricular fibrillation.

Method: *gan chan pi* 12g, fresh whole plant of *wan nian qing* 30g (or dry *wan nian qing* root 9g). Drugs for activating blood and suppressing liver such as *chuan niu xi* 9g, *xia ku cao* 9g, *dan shen* 12g are added for coronary disease. Drugs for expelling wind and clearing heat such as *mu fang ji* 15g, *sheng di* 15g, *ren dong teng* 30g for rheumatic heart disease completed with rheumatic action. Drugs for clearing heat and eliminating phlegm such as *hu er cao* 30g, *pu gong ying* 30g, *yu xing cao* 30g for cor pulmonale. Drugs for softening hardness and eliminating stagnation such as *huang yao zi* 15g, *hai zao* 15g, *ku bu* 15g for hyperthyroid heart disease. *Mu tong* 4.5g is added for auricular fibrillation. They are decocted with water, twice a day.

Result ; the shortest time for taking drugs is 7 days, and the longest one is 2 months. 10 cases are improved obviously, 5 cases are improved, and 5 cases are failed. The total effective rate is 75%, obvious effective rate is 50%. 3 cases of coronary disease are improved obviously, and 1 case is improved. 4 cases of rheumatic heart disease are improved obviously, 3 cases are improved and 3 cases are failed. 1 case of cor pulmonale is improved and 2 cases are failed. 3 cases of hyperthyroid heart disease are improved obviously.

The changes of sign: 7 cases of obvious edema (among which 4 cases are complicated ascites) are completely abated after 3 to 4 days, body weight lost 3 to 5.5 kg. The edema begins to be eliminated after 2 days. 12 cases of swelling liver are eliminated, the shortest time is 7 days, and the longest one is 2 months. 14 cases of quick heart beat are reduced in different degrees. There are no changes of 7 cases of auricular fibrillation

Side effect: 4 cases have mild poor appetite and nausea after taking drugs for half months. But it dose not affect the therapeutic effect. ⑨

7) Carbuncle, furuncle and ulcer: the skin of one big *chan chu* is use to cover the cover (internal face forces on the focus, not internal face. Because it is difficult to remove the skin if internal face forces on the focus.). The skin of *chan chu* is pricked by needle to make holes for toxin to go out. The patient would feel good after using it, and the disease would be cured after using it for several times.

Comment: both *ban mao* and *cha su* can resolve toxin, are drugs for resolving toxin, eliminating carbuncle, attacking hardness and eliminating mass. They are suitable for oral administration and external use, and have anticancer action. However, they have their own advantages. *Ban mao* is good at attacking hardness, resolving toxin, killing parasite and making blister. While *chan chu* is good at strengthening heart, promoting urine and relieving pain by anaesthesia. Their dose should be controlled strictly. Poisoning of *chan su*, *chan chu* and *ban mao* is not unusual. They can not be neglected.

1) *qiang xin san* on all kinds of heart failure, New Medicine Communitation

5:46, 1972

2\ pharmacological mechanism of *liu shen wan*, Japanese pharmacology Journal 88:119, 1968

3\ local anaesthesia action of bufalin, Japanese pharmacology Journal 85:190, 1956

4\ health rear service of Guangdong army, et al: general new edited TCM page 712, 1972, Beijing

5\ *chan chu fu fang* on adult acute granulocytic leukemia assisted with chemotherapy, Clinical Date Compile of Achievements Exhibition of Combination of TCM and Western Medicine, page 142, 1974, Shanghai.

6\ summarization on experiment research and clinical application of *chan chu*, New Medicine Journal 2:91, 1974

7\ air force health rear service of Nanjing military region, et al gastric cancer, Compilation of TCM Empirical Formulas page 508, 1974

8\ combination of TCM and western medicine on 83 cases of cancer, Date Compile of Achievements Exhibition of Combination of TCM and Western Medicine, page 131, 1974, Shanghai

9\ clinical observation on chronic heart failure mainly treated by *wan nian qing* and *gan cha pi*, Date Compile of Achievements Exhibition of Combination of TCM and Western Medicine, page

151, 1974, Shanghai

17 Lou Gu

Lou gu is *Gryllotalpa Africana* Palisot de Beauvois. Its popular name is *tu gou*. It is salty in flavor, cold in nature, nontoxic, and attributive to stomach and bladder meridians.

The functions are: 1) promoting urine and defecation, 2) eliminating carbuncle, resolving toxin, 3) promoting discharge of placenta and treating spur. It is suitable for edema, dysuria, carbuncle, severe ulcer, retention of placenta, etc..

Doctor *Tao Hongjing* says, the part above waist of *lou ku* can stop urine and stool, and the part under waist can promote urine and defecation. Doctor *Zhang Song*, et al^①, do experiments about the function of promoting urine and the toxin of *lou gu*. They grind the whole body of *lou gu* into powder and do experiments on mouse and rabbit, finding no toxic reactions and no obvious function of promoting urine. Doctor *Wu Weizhi* ^② uses *kou gu* without head, feet and wings to treat 17 cases of edema (the reasons include anaemia, nutrition, heart, kidney, beriberi, and other diseases.). Majority of patients begin to have urine after taking drug for 1 to 3 hours, and the amount and frequent increase. The function of promoting urine and abating edema is most obvious after taking drug for 3 to 5 days. Seeing from this, the practical experience is every valuable and herb processing can not be neglected. Other wise, the therapeutic effect would be affected.

The main mechanism for *kou gu* to promoting urine and abating edema is, considered by doctor *Wu Weizhi*, that it promotes discharge of uric acid

accumulated in the body, because *lou gu* contains thiamin and alkaline amine salt. After alkaline amine salt is absorbed, it is decomposed and amino acid becomes free which changes into carbamide in liver. When carbamide is discharged by kidney, it has osmotic diuresis action in renal tubule.

Lou gu is a good drug for promoting urine and defecation. Its function would be more powerful with the help of *xi shuai*. The dose must be small for weak patient, or it is assisted by drugs for supplementing. Just as what Doctor *Zhu Danxi* points out, *lou gu* is quite effective to treat water, but it is fierce, so weak patients are allowed to take.

The head, feet and wing are removed when it is used as drug. The dose is 6 to 12g for decoction, and 1 to 2g for powder, three times a day. The functions of decoction are more powerful than pills. The clinical applications are:

1) Edema: *lou ku* (without head, feet and wing) is baked by mild fire and then grinded into powder. 2g is taken with water or rice soup, three times a day. It is suitable for edema with not too much weak body. After taking drug, urine amount increases, stool become unformed, their frequent increases and rugitus comes up without abdominal pain. Usually it can be taken for 5 to 7 days continuously. Decoction of *Huang qi 15g* and *dang shen 15g* are added for weak body. *Lou gu* is taken with the decoction.

2) Retention of urine after surgery: it is effective to retention of urine after surgery due to bladder paralysis. Doctor *Xu Shuwei* uses *lou gu 7*, *qiang lang chong 7* to treat retention of urine and stool in “*ben shi fang*”. They are baked into yellow color on new tile, and then grinded into powder. The drugs with the dose mentioned above are taken by one time with water. Contemporary doctors use it to treat retention of urine and stool due to intestine and bladder paralysis.

[case] patient *Xu*, male, 40, cadre. He received appendectomy under subarachnoid anaesthesia on 26th, March, 1975. He felt abdomen distention and wanted to urinate three hours after surgery, but failed after four hours. 20 *lou gu* (without head, feet and wing) were decocted into a bowl of decoction, and taken by one time. After one hour, 1000ml urine was discharged out, and abdominal distention disappeared.

Comment: the case is afforded by *Gao Zhiqing*, a doctor of Nantong first people's hospital. It is said that this method has been used for decades of cases, receiving good effect. 2 to 3g of powder can also be used.

3) Ascites of liver cirrhosis: it is subdivided into excess and deficiency. Spleen and kidney are treated for deficiency, and clearing heat and eliminating dampness are used for excess. The excess can not be attacked fiercely. Reducing excess and supplementing deficiency are used at the same time for severe ascites with dysuria. Doctor *Zhang Cigong* once used the followed formula to treat it effectively. *Lou gu 4*, *xi shuai 4*, *huang qi 9g*, *di bie chong 4.5g* are grinded into powder and taken by four times, twice a day. It can be taken continuously.

Comment: compatibility of the formula is quite good. *Lou gu* can promote

urine and eliminate distention more powerfully with the help *xi shuai*; *di bie chong* can activate blood, disperse stasis, eliminate mass and stagnation; *huang qi* can supplement *qi* to promote urine, mitigate the natures of other drugs. These drugs supplement healthy *qi* and expel factors at the same time, give consideration to both of branch and root.

4) Chronic nephritis and uremia: they are caused by longy duration of nephritis without being cured and kidney failure comes up. The manifestations are low spirit, dizziness, blur eyesight, somnolence, poor appetite, nausea, oliguresis, edema, little and slippery coating, pale and thin tongue, deep and thin pulse, or thin and rapid pulse. It is due to deficiency of spleen and kidney, fire deficiency of life-gate, flood of water, adverse flow of turbid *yin*, deficient healthy *qi* and excessive pathogenic factors. The treatment methods are warming kidney, supplementing spleen, soothing liver, regulating lung, tonifying fire resource to eliminate *yin*. *Zhang Mengnong*, a doctor of Hubei TCM college, considers says, in this condition, small dose of drugs is not powerful enough to fight against factors, heavy dose of drugs is too powerful for the body to bear; therefore, *bai bian dou* is used with heavy dose to warm middle-*jiao*, eliminate dampness, supplement stomach and spleen, assisted by *chi xiao dou* to promote urine and eliminate edema, *da mai ya* to eliminate stagnation and distention; they make *lou gu*, *zhe chong* permeate into *shen yan zhong zheng fang* (*ma huang* 4.5g, *bai zhu* 9g, *bai shao* 9g, *chen pi* 9g, *mu tong* 9g, *shu fu pian* 9g, *zhi mu* 12g, *ze xie* 12g, *chao di fu zi* 12g, *che qian cao* 12g, *fu ling* 12g, *xi xin* 3g, *gui zhi* 4.5, *sheng jiang* 5 pieces); they are grinded into powder, 9g every time, three times a day; this formula named *bai bian dou san*; it treat severe disease by drugs with mild nature, make fierce drugs mild, tonify body without resulting stagnation, promoting stagnation mildly; continuous take can help the patient turn the corner and completed cured at last. These are experience and worthy study. However, combination of TCM and western medicine is used to rescue the severe cases. *Bai bian dou san* is used after the disease is steady. The formula is *bai bian dou* 300g, *chi xiao dou* 240g, *jiao bai zhu* 60g, *bai fu ling* 60g, *shu fu pian* 60g, *ze xie* 60g, *ma huang* 60g, *gui zhi* 60g, *chao bai shao* 60g, *chao huang bai* 60g, *che qian zi* 60g, *mu tong* 60g, *chen pi* 60g, *chao zhi mu* 120g, *chao di fu zi* 120g, *chao mai ya* 120g, *gan cao* 30g, *xi xin* 30g, *gan jiang* 30g, *lou gu* (without head, feet and wing)36, *di bie chong* 36. They are stir-baked together until *bian dou* is scorched, grinded into powder and then stored in bottle. 6 to 9g is taken with rice soup every time, three times a day. It is the best that they are swallowed with a little water. One dose composes one course of treatment. Severe case can be treated by three continuous doses. The therapeutic effect would be better if *chong wei zi* 60g, *ze lan* 60 and *dang gui* 60g are added for female.

[case] patient *Tian*, male, 31. He suffered chronic nephritis with frequent facial and limbs edema. Urine protein was usually positive. He was hospitalized, but not cured. He visited the author on 28th, October, 1969. He

was prescribed *bai bian dou san*. After taking one course of drugs, edema disappeared and urine protein was negative. It was cured by another course.

Comment: 190 army hospital of the Chinese People's Liberation Army uses this formula to treat 130 cases, receiving obvious effect. *Shen yan zhong zheng fang* (modified according to symptoms) is decocted first for critical cases, then *bai bian dou san* is taken.

5) Scrap iron and scrap copper obstructed in esophagus: baked *lou gu* is grinded into powder, and 1.5g is mixed with water. The solution is dropped into the throat.

6) Retention of placenta: the patient feels abdominal distention due to retention of placenta after child-birth. Seven *lou gu* are decocted by water for 20 minutes and it taken when it is warm ("*yan nian fang*").

7) Urine system stone: 4 to 7 *lou gu* are baked and grinded into powder, and taken with water. Rice wine is taken as guiding drug. It is taken once a day.

8) Retention of urine due to trauma: *lou gu* 2, *xi shuai* 1, *ju hua* 10g are pounded and made into pills. They are taken with the decoction of *lian qian cao* 120g.

9) drawing piton, bamboo thorn and glass in body: *lou gu* 5 to 10, yellow sugar 15 to 24g are pounded and used to cover the focus (another formula is *chuan duan* 15, *bing pian* 0.6 added, more effective). The foreign body draws by itself after using the drug for 3 to 6 hours.

[case] patient *Cheng*, male, 25. Bamboo thorn is prinked into body when he was working. It is difficult to be drawn, but he was unwilling to receive surgery. The method mentioned above was used. Bamboo thorn drew by itself after using the drug for about 3 hours. It was cured after using *viola crystalline*.

1\ diuresis function and toxin experiments of *lou gu*, *New TCM and Herbs*, 9:4, 1958

2\ therapeutic effect observation of *lou gu* on 17 cases of edema, *Jiangsu TCM*, 1:19, 1961

18 xi shuai

Xi shuai is *Gryllulus chinensis* Weber, and is also named *jiang ju gan*. It is slight warm in nature, pungent and salty in flavor and nontoxic. The functions are 1) promoting urine, 2) treating dystocia, 3) promoting rash, 4) treating impotence. It is powerful to promote urine and eliminate edema, and effective to retention of urine due to bladder paralysis and oliguria of chronic nephritis. It is reported that it can resist fluid retention caused by alkaline drugs and water import, therefore, it is help for uremia.

Another congeneric cricket contains a kind of substance which can abates fever. It is once named *grypyrin*, and can expand vessel and reduce blood pressure. It is worthy further studying.

The dose for one day usually is 2 to 4 for decoction, and 1.2 to 1.8g for powder. The functions of decoction are more powerful than powder. Pregnant women are not allowed to taken. The clinical applications are:

1) dysuria: one *xi shuai* is baked, grinded into powder and taken with water

for dysuria with abdomen distention. Half *xi shuai* is enough for children.

2) Chronic nephritis: doctor *Zhang Cigong* uses the followed formula to treat dysuria, edema, ascites of chronic nephritis. 30 baked *xi shuai* and 30 baked *lou gu* (without head, feet and wings) are grinded into powder and put into 30 parcels. One parcel is taken by three times in one day. They are taken with the decoction of *huang qi* 15 to 30g (*shu fu zi* 12, *xian ling pi* 12g added for severe *yang* deficiency). Combination use of reducing and supplementing is quite effective.

3) Impotent: *shu di* 12g, *xian ling pi* 12, *zhi xi shuai* 2, *suo yang* 9g, *dan cong rong* 9g, *zi he che* 4.5g, *gan cao* 4.5g, decoction.

4) Ascites of terminal liver cirrhosis: *fu fang chan chu jiao wan*: *chan chu* 8g, *xi shuai* 2g, *lou gu* 2g, *di long* 0.8g. They are baked and grinded into powder separately. Then they are mixed and put into 40 capsules. 2 capsules are taken every time, four times a day. It can promote urine and eliminate distention.

5) Dystocia: 2 *zhi xi shuai* is grinded into powder and taken with warm water. It can treat dystocia due to powerless contraction.

6) Abdominal distention and oliguria of liver-kidney syndrome: jaundice, ascites, coma, indifferent expression, turbid and greasy coating, thin and wiry pulse of liver-kidney syndrome are caused by turbid dampness confusing spirit. The drugs for eliminating dampness and turbidity, opening orifice are used, such as *shi chang pu* 9g, *yu jin* 9g, *yuan zhi* 9g, *zhu li ban xia* 9g, *chen jing dan* 6g, *chen xiang pian* 1.5g, *fu ling* 12g. As for abdominal distention and oliguria, *xi shuai* 1, *hu po* 1g, *chen xiang* 0.6g are grinded into powder and swallowed, twice a day. They can promote urine and eliminate distention.

Comment: *lou gu* and *xi shuai* are drugs for promoting urine and eliminating edema. But *lou gu* is cold in nature and powerful, while *xi shuai* is warm in nature and mild. *Lou gu* usually is used for the patient with strong constitution. *Xi shuai* can be used for the patient with deficient body. They often are used together to acquire better effect for all kinds of edema with dysuria and constipation. *Lou gu* not only can promote urine, but also promote defecation, so it should be careful when it is used for the patient with unformed stool. *Xi shuai* is warm, can treat impotence with the help of drugs which can warm kidney and tonify *yang*. It is used with drugs for supplementing to treat edema with defiant body, reducing and supplementing at the same time.

19 Ge Jie

Ge jie is dried body of *Gekko gekko* L. without organs. It is also called *xian chan*, *da bi hu*. The body shape is similar to *bi hu*, but larger. They like to stay in cliff, stone cavity, cliff, eaves and tree hole, and they hide by day and come out by night. It is mainly produced in Guangxi and Yunnan provinces. In the recent years, other provinces import them for cultivation. The whole body can be used as drug. Its tail is named *ge jie wei*, and the functions are powerful. *Ge jie* is slight warm in nature, salty in flavor, and attributive to lung and kidney meridians.

“*ben cao gang mu*” says, it can supplement lung *qi*, stop asthma, relieve thirst, is similar to *ren shen*; it can nourish *yin* and blood, supplement essence and tonify weakness, is similar to mutton. It is a good drug for warming and supplementing. The functions are (1) supplementing lung and nourishing kidney, (2) stopping cough and asthma, (3) supplementing essence and *yang*, (4) warming and tonifying kidney *yang*. It can be used for the deficient cold type of lung atrophy, hemoptysis, cough, asthma, weak body due to longy disease, edema, hiccup of old patient, diabetes, amenorrhea, impotence, nocturnal emission, lower back pain, etc.. In clinic, it is often used for chronic bronchitis, lung tuberculosis, asthma, neurasthenia sexualis, amenorrhea, and so on.

It is confirmed by experiments that the weight of prostate, spermatophore and levator ani muscle increase when male mouse is injected by extraction of *ge jie* (male-hormone-like action); oestrus is prolonged and ovary and uterus are enlarged when female mouse is injected by alcohol lixivium of *ge jie* (female-hormone-like action). Emasculate mouse would have oestrus again when it is injected by alcohol lixivium of *ge jie*. Herbs books say, it can promote menstruation (“*da ming ben cao*”), nourish essence and blood, promote sexual activity (“*ben cao gang mu*”), and supplement minister-fire of life-gate (“*ben cao qiu zhen*”). These comments are similar to what we consider in modern time, illustrating that ancient doctors once practiced and observed deeply and carefully.

It is pungent and slight warm, so it is usually assisted with drugs for nourishing *yin*. It should be careful when it is used for *yin* deficiency, lung dryness, heat-dampness in kidney meridians or hyperactivity of minister-fire.

It is often used as pills and powder, the dose is 0.3g to 0.6g every time, twice to three times a day. The clinical applications are:

1) asthma: asthma is subdivided into cold, heat, deficiency and excess types. *Ge jie* is pungent and slight warm, can warm and supplement, so it is suitable for deficient cold type (failure of kidney to receive *qi*) of asthma. It can be used for cardiasthma, bronchial asthma with longy duration or complicated with pulmonary emphysema and edema. According to the author's experience, *shen ge san* is used for obstinate deficient asthma to relieve the disease and achieve fewer or no outbreaks. *Shen ge san*: *ge jie* 2, *hong ren shen* 15, *bei sha shen* 15, *mai dong* 9g, *ju hong* 9g, *zi he che* 24g. They are grinded into powder, 1 to 1.5g every time, twice to three times a day. The drugs are taken once a day to enhance the therapeutic effect after the asthma has been stopped.

[case] patient *Shen*, male, 56, cadre. He suffered asthma for more than 10 years. The disease was severer in winter. In the recent years, the disease aggravated gradually, he has cough, asthma and rapid breath which were severer after activity. He could not lie down in the evening. Other manifestations were unsmooth discharge of white and sticky sputum, chest oppression, poor appetite, facial edema in the morning, and feet edema in the

afternoon. Chest X ray showed rough and disordered lung grain, increased brightness, lower diaphragm, and the diagnosis was pulmonary emphysema. The tongue was slight red, coating was thin, and pulse was thin and slippery. Lung, spleen and kidney were deficient and affected each other, making disease severer day by day. Warming kidney and supplementing root were emphasis, and *qi* and *yin* were given consideration to at the same time, to relieve asthma and dyspnea, make expectation smooth and make lung *qi* recover. One dose of *shen ge san* was prescribed, 1.5g every time, twice a day. After taking drugs, asthma and dyspnea were relieved a little, he felt chest comfortable and could lie down in the evening. After continuous intake, spirit and appetite recovered, asthma and dyspnea would not be aggravated by activity, and he felt quite good. Asthma and dyspnea were completely relieved by two doses and he could do light work. Two-year follow-up showed that the condition was steady.

2) Chronic bronchitis: in the recent ten years, prevention, treatment and research work are carried out extensively due to consideration and emphasis of Party, and many formula and herbs are summarized according to practice, laying a good foundation to treat chronic bronchitis. *Ge zei san* is suitable for longy duration of chronic bronchitis with weak body. *Ge jie* can supplement lung, nourish kidney, stop cough and asthma; doctor *Meng Xian* considers that *wu zei gucan* supplement essence, and “*ye shi zhai xuan fang*” uses *wu zei gu* to treat infantile phlegm rales. Therefore, *wu zei gu* is an effective drug for chronic bronchitis and asthma. The formula is *ge jie 2, wu zei gu 150g*. They are grinded into powder and mixed with 500g of refined white sugar. They are put into 40 parcels. One parcel is taken by two times in one day. The drugs take effect after one to two weeks, and the condition is relieved after three to four weeks.

[case] patient *Wang*, male, 40, cadre. He suffered wind cold 6 years ago when he was on a business trip to northwest China, the cough stopped after more than 3 months. It reoccurred by over-work and coldness, was severer in winter. The manifestations were choking cough, chest oppression, white and sticky sputum, unsmooth expectation, even tears and snivel, red face and rapid breath which became mild when white and sticky sputum was discharged out, poor appetite, fatigue, thin and greasy coating, pale and fat tongue, thin and weak pulse. Longy cough injured lung and resulted in deficient lung and spleen. Warming lung, regulating spleen, stopping cough and asthma were applied. After taking drugs for six days, the symptoms began to be relieved, expectation was smooth and cough was milder. After taking drugs for two weeks, disease condition was steady and appetite was promoted. He was cured by continuous intake. The follow-up after three years showed no reoccurrence.

3) Lung tuberculosis: nourishing *yin*, supplementing lung, strengthening spleen and kidney are mainly used, and drugs are modified according to syndrome. Usually *ge mu wan* can be used. *Ge jie 2, bei sha shen 60g, zhi*

mu 30g, chuan bei 30g, xing ren 30g are grinded into powder and made into pills with honey as large as mung bean, 6 g every time, twice a day. *Ge jie* is good at supplementing lung, nourishing kidney, warming *yang*, supplementing *qi*, promoting body resistance to disease and constitution, and promoting absorption and heal-up of focus. *Sha shen* and *zhi mu* are added to nourish *yin*, *bei mu* and *xing ren* are added to stop cough and eliminate phlegm, and they are suitable for *yin* and *qi* deficiency of infiltrative lung tuberculosis or completed with cavity. Decoction of *Sheng di 9g, mai dong 9g, sheng di yu 30g* is taken with pills for red and purple tongue and severe tidal fever.

[case] patient *Yi*, female, 39, farmer. She once suffered lung tuberculosis when she was young. In the recent 5 years, she became thin gradually, and had tidal fever in the afternoon, poor appetite, night sweat, cough with little sputum or blood sometimes and dry mouth. Chest X ray revealed sheet shadow with confuse edge. ESR was 52 mm/ 1 hour. The coating was thin, tongue was red, and the pulse was wiry, thin and rapid. It was *yin* deficiency and lung dryness type of *lao ji zheng*. *Ge mu wan* was prescribed. It was taken with decoction of *sheng di, mai dong* (nourishing *yin*) and *di yu* (clearing heat and resolving toxin). After two weeks, all the symptoms were improved. After one month, chest X ray revealed absorption of majority of sheet shadow. ESR was 23mm/1hour. The formula was taken continuously. He was cured after three months.

4) Impotence and semen emission: both of them are due to deficient kidney *yang* and uncontrol of lower recourse. *Ge jie* can warm kidney, tonify *yang*, promote sexual activity, and astringe lower recourse, and is effective to impotence and semen emission due to deficient kidney *yang*. The formula is *bu shen wan: ge jie 2, shu di 45g, tu si zi 45g, jin ying zi 45g, ba ji tian 45g, dan cong rong 45g, zi he che 30g*. They are grinded into powder and made into pills with water as large as mung bean, 6g every time, twice a day. It is not suitable for heat-dampness in lower-*jiao* or hyperactivity of minister-fire with yellow coating and red tongue.

[case] patient *Wang*, male, 32, worker. He had frequent semen emission when he grew up, and impotence and early emission when he got married. The manifestations were dizziness, fatigue, weak waist and lower limbs, unbearable to overwork and extreme aversion to cold in winter, thin coating, pale tongue, thin pulse and weak pulse in *chi* location. It was fire deficiency of life-gate, deficient cold of essence and *qi*, so supplementing kidney, tonifying *yang*, warming and astringing essence were applied. He was prescribed one dose of *bu shen wan*. After taking drugs for ten days, the spirit was promoted and penis could erect but not hard enough. He was cured after taking two doses.

20 Hai Ma

Hai ma is the whole body (without organs) of *Hippocampus trimaculatus* Leach, *Hippocampus kelloggi*, *Hippocampus histrix* Kaup or *Hippocampus kuda* Bleeker. The body is yellow-white or brawn with luster, the small one is 3

to 6 *cun* long and the large one is near *chi*. Their tails twine and are similar to horse, so they are called *hai ma* (sea horse). It is produced in Guangdong, Hainan and Fujian provinces. It is warm in nature, sweet and slight salty in flavor, and attributive to kidney.

The functions are 1) warming kidney, tonifying *yang*, 2) activating blood and dispersing stasis. It has exciting and strengthening functions, not only can promote sexual activity to treat impotence, but also promote spirit of old people and weak patients. It can promote weak uterus contraction to expedite child delivery. It also can be used for much leucorrhea with weak body.

It is especial effective to obstinate furuncle, severe ulcer, dead tissue and fistula.

Because of its warm nature, it is not suitable for high blood pressure without *yang* deficiency and *yang* hyperactivity due to *yin* deficiency.

The dose is 3 to 6g for decoction, and 1 to 1.5g for powder. It is used with other drugs for external use. The clinical applications are:

1) Obstinate furuncle, severe ulcer, ulcer, and fistula: *hai ma ba du sheng ji san* is an secret empirical formula handed down from ancestors of *Chen Hongbin*, a surgical doctor of our hospital. It can draw pus and toxin, promote granulation, is good at treating all kinds of carbuncle, ulcer, obstinate furuncle, fistula and dead tissue. It can be used for longy duration of these diseases no matter *yin* syndrome or *yang* syndrome. Our hospital uses it to treat all kinds of fistula and longy duration of ulcer of many years, receiving good effect. In the recent years, 217 cases of fistula are treated, among which the longest duration is 20 years, and the shortest one is 3 to 4 months. They are all cured.

Formula: *hai ma* 60g, *guang dan* 60g, *pao jia* 60g, *huang bai* 60g, *jiang huang* 60g, *wu gong* 40, *fei xiong huang* 45g, *gan cao* 45g, *sheng jun* 30g, *dan quan xie* 30g, *bing pian* 9g, *yuan cun* 6g. They are grinded into powder and stored in bottle.

Method: according to the condition of necrotic tissue, powder with different doses of *hong sheng* or *huang sheng* is used to cover the focus which then is covered by adhesive plaster. *Sang pi* paper spill (moisten by water or Vaseline) which is coincided to the depth and size of fistula is used to dip the powder with 5%, 20%, 50% and 80% *huang sheng* or *hong sheng* (powder with 50% to 80% *sheng dan* for the fistula with thin wall and much dead tissue, 5% to 20% *sheng dan* for mild fistula). The powder can be used alone for nearly cured fistula and ulcer until they are cured.

[case] patient *Li*, female, 28, worker. She suffered surgery due to ectopic pregnancy on 7th, May, 1976. She received incision and drainage because of right-low celiac abscess on 25th, May, 1976. It was not cured after more than two months. She received another surgery, and fistula came up. There was much purulence. She came to surgery department of our hospital on 7th, September. The fistula was 4cm deep, the tissue was hard. 20% *hai ma bai du sheng ji san* was put into the fistula. Because of her weak body, five doses of decoction for supplementing *qi* and blood, resolving toxin and drawing pus

was prescribed for oral administration. The powder was changed once per two days. After using 5 times, the secretion became less, and then 5% *hai ma bai du sheng ji san* was used, changed once per 3 to 5 days. The fistula became shallow, and was cured on 18th, October.

2) Frequent urine in night due to kidney *yang* deficiency, much leucorrhea with weak body: *hai ma* can warm kidney, tonify *yang*, nourish and supplement body, with the help of *qi zi*, *sang piao xiao*, *jin ying zi*, etc.. They are obvious effective.

3) Infantile furuncle in summer and impetigo: they are easy to reoccur. 4.5g of *hai ma* and 100g of pork are ate at the same time to promote body resistance. The disease is improved obviously after taking twice to three times.

4) Chronic nephritis: *hai ma jian shen wan* is effective to chronic nephritis with edema sometimes, abnormal kidney function, positive urine protein and longy duration. It should be careful when it is used for high blood pressure. The formula is *hai ma 30g, sha ren 30g, fu ling 30g, shan yu rou 30g, dang shen 30g, shu di huang 90g, shan yao 60g, bo he ye 15g*. They are grinded into powder and made into pills with honey as large as mung bean, 7.5g every time, twice a day.

[case] patient *Xu*, male, 43, worker. He suffered chronic nephritis for more than 4 years, and was not cured by many treatment. The manifestations were edema, dizziness, weak lower limbs, aversion to cold, fatigue, poor appetite, unformed stool, lower back pain, heavy legs, much or little urine, white coating, pale and fat tongue, deep and thin pulse, and weak pulse in *chi* location. Test: urine protein ++ to +++, urinary cylinder ++, RBC and WBC + to ++, PSP 38%, non-protein nitrogen 85mg%. It was due to *yang* deficiency of kidney and spleen, water flood, uncontrol of essence and *qi*. The treatment methods were supplementing spleen and kidney, warming *yang*, controlling water, and stringing essence and water. He was prescribed one dose of *hai ma jian shen wan*. Two weeks later, urine protein was +- to +, urinary cylinder was seen sometimes, a little RBC. Edema disappeared, spirit was improved, body weight increased, and kidney function was normal after taking three doses of drugs. *Liu wei di huang wan* was prescribed to enhance the therapeutic effect.

5) Impotence and sterility due to cold uterus: *hai ma* is good at tonifying kidney *yang*, warming uterus, regulating menstruation, so it is effective to impotence and sterility due to cold uterus. *Hai ma wen shen san*: *hai ma 8* is grinded into powder, 1.5g every time, twice a day.

[case] patient *Huang*, female, 32, worker. She did not have birth 6 years after marriage. The manifestations were pale complexion, thin body, extreme aversion to cold, weak waist and lower limbs, cold sensation in lower abdomen, clear and thin leucorrhea, delayed and little menstruation, hypoactive sexual desire, thin coating, pale tongue, thin pulse, and weak pulse in *chi* location. It was due kidney *yang* deficiency, *chong* and *ren*

meridians deficiency and cold uterus, so *hai ma wen shen san* was tried, 1.5g every time, twice a day. It was taken with hot Shaoxing wine. After two weeks, the spirit was promoted, cold sensation in lower abdomen was reduced, and leucorrhoea became normal. After two months, the menstruation was normal. She had gestation after four months. *Gui pi wan* was prescribed for continuous treatment.

6) bed sore: it is common seen in the patients of coma, paralysis and weak body who are difficult to turn over. The treatment depends on the stage, size and conditions. Usually it is subdivided into three degrees. Degree I: *qi* stagnation and blood stasis type, *hong hua ding* (*hong hua* 3g is soaked into 100ml of 50% alcohol for 3 days.) is used to wipe the focus which then is massaged by palm to eliminate stasis. It is used three to four times. Usually the disease is cured after 3 to 5 days. Degree II: obstruction of toxic dampness, there is pus and ulceration. Eliminating dampness, resolving toxin, draw stale and generating new are used. *Hai ma ba du sheng ji san* (different doses of *hong sheng* or *huang sheng* are added according the condition of ulcer.) is used to cover the focus which then is covered by gauze, changed once a day or per two days. After 10 to 14 days, granulation tissue is red and luster. Degree III: healthy *qi* deficiency and ulcerated sore, the manifestations are weak body, large and sunken focus, necrotic tissue, and dark granulation tissue. *Hai ma ba du sheng ji san* is used. 50% to 80% *hong sheng* is used to draw necrosis and dead tissue for necrotic and dark focus. After the necrosis is drawn and granulation tissue becomes luster, 5% to 20% *hong sheng* is used, or *hai ma ba du sheng ji san* is used alone. Decoction for supplementing *qi* and blood and strengthening root is used at the same time to promote the recovery for severe weak patient.

[case] patient *Wang*, male, 46. He suffered paralysis due to compressive fracture of lumbar vertebra 2 and 3. He had bed sore on rump with 13*9*4cm. It was degree III. The secretion was much, granulation tissue was not luster complicated with necrotic sinew. He was mainly treated by *hai ma ba du sheng ji san*, changed once per two days. He was cured after one month.

Comment: *ge jia* and *hai ma* can warm kidney and tonify *yang*. *Ge jie* is good at supplementing lung and stopping asthma, while *hai ma* is obvious effective to fistula, obstinate furuncle and severe ulcer. They both are warm drugs, so they are suitable for *yang* and *qi* deficiency, not suitable for hyperactivity *yang* due to *yin* deficiency.

21 Shu Fu

Shu fu is dried whole body of Porcellio scaber Latreille. The body is small about 10mm long, and shape is flat ellipse. It has antennas, the color is greyish white with luster. It is ball when it folds. It likes to stay in gloomy and damp place. It has many names, such as *shi sheng chong*, *di shi*, *xi gua chong*, *an ban chong*, etc.. It is produced in many province, mainly Jiangsu and Zhejiang provinces. “*ben jing*” considers its nature as warm, while “*bie lu*” considers its nature as slight cold. Judging from its functions, it seems that its

nature is slight cold. It is acid in flavor, nontoxic and attributive to liver meridians.

Ping jia chong (*Armadillidium vulgare*) is similar to *shu fu*, is dark brown or slight yellow. It is fragile and fishy. Drugstores usually use it to replace *shu fu*, and some herbal books also see them as one kind of insect. It is wrong. Besides the same functions of *shu fu*, *ping jia chong* also can stop asthma and treating blood stranguria.

Shu fu is good at breaking blood stasis, eliminating mass, dredging amenorrhea, dredging water channels, stopping convulsion and relieving pain, so it can be used for heat syndrome and excess syndrome of blood stasis, mass, mouth ulcer, swelling throat, amenorrhea, retention of urine and pain.

"*ben jing*" clearly says that it can treat retention of urine and amenorrhea, and dredge water channels, and also points out the functions of stopping spasm, clearing heat to treat epilepsy, spasm, cold and heat and malaria. Doctors of later ages use it to longy cough and asthma and pain after surgery, extending the meaning of stopping spasm.

Bie jia jian wan, which Doctor *Zhang Zhongjing* uses to treat enlarged spleen and mass, contains *shu fu*. "*zhou hou fang*", "*qian jin fang*", "*sheng hui fang*" and other books also use *shu fu*.

In clinic, it is often used with drugs for activating blood and dispersing stasis, such as *zhe chong*, *qiang lang*, *da huang*, *tao ren*, etc., to treat amenorrhea and mass; with drugs for promoting urine and eliminating edema, such as *che qian zi*, *ze lan*, *ze xie*, etc., to treat dysuria or edema; with drugs for softening soft and dispersing stasis, such as *bie jia*, *di bie chong*, etc., to treat enlarged spleen.

Because of fierce function of breaking stasis, it should be careful when it is used for pregnant women or weak patient without blood stasis.

Usually it is baked into yellow color by mild fire, and grinded into powder. It is usually made into powder form and pill form. The dose is 1 to 2g for one day. If it is used for decoction, the dose is 4 to 6g. The clinical applications are:

1) Amenorrhea and dysmenorrhea: they can be subdivided into excess and deficiency syndromes. Because of fierce function of breaking stasis, it is suitable for excess syndrome of amenorrhea and dysmenorrhea due to blood stasis obstruction, with the drugs for dispersing stasis and regulating menstruation, such as *dang gui*, *chuan xiong*, *wu ling zhi*, *tao ren*, etc..

[case] patient *Zhang*, female, 35, worker. He suffered amenorrhea for three months due to coldness being caught in rain. The manifestations are dark complexion, abdominal pain and distention, thin and greasy coating, dark red tongue, deep and rough pulse. It was due to cold stagnation, blood stagnation and stasis. Warming meridians and dispersing stasis were applied.

Quan dang gui 10g, chuan xiong 10g, rou gui 2g, shu fu 5g, di bie chong 10g, tao ren 10g, wu ling zhi 10g, gan cao 4g

After taking four doses, the abdominal pain became severer and menstruation arrived with purple blood and gores. After taking another one

dose, abdomen pain is relieved. She was cured after regulation.

2) Longy duration of malaria: Doctor *Zhang Zhongjing* uses it to treat longy duration of malaria, just *bie jia jian wan* in “*jin kui yao lve*”. Because *shu fu* is good at dredging meridians and can eliminate mass (*Huang Yuanyu*' words), therefore, it can be used as main drug or *bie jia jian wan* (8g every time, twice a day) is used to treat frequent reoccurrence of malaria and enlarged spleen with stasis spots in tongue or purple tongue.

[case] patient *Xue*, male, 42, farmer. Vivax malaria reoccurred frequently, and there was a hard mass under left ribs. Enlarged spleen had come up. *Shu fu* 14 and *dou chi* 14 are pounded and then made into pills as large as *qian shi*. Two pills were taken one day before reoccurrence, and another two pills were taken two hours before reoccurrence. The malaria was controlled. Later, *bie jia jian wan* 6g was taken both in the morning and in the evening. The mass was reduced after two weeks.

3) Mouth ulcer, tonsillitis, thrush, gingivitis: *shu fu* is good at activating blood, dispersing stasis, clearing heat, resolving toxin and relieving pain. Therefore, it is effective to these symptoms. 30g of live *shu fu* is washed, baked on tile, grinded into powder, added with small dose of *bing pian* and then stored in bottle. The powder is used to cover the focus, can not be swallowed, but can be spitted with saliva. It is used twice to three times. It is reported by Hu'nan board of health ① that it is used to treat more than 250 cases and they are cured usually after 3 to 5 days.

[case] patient *Xu*, male, 28, worker. He suffered chronic tonsillitis which often was induced by coldness. He had swelling and pain tonsil with a little white stale for four days. Because the fever was mild, the method mentioned above was used. The drugs took effect in the first day, and the disease was cured by three days.

4) Dysuria: it can be used for the dysuria which is caused *qi* stagnation affecting blood and heat-dampness stagnation. In “*qian jin fang*”, 7 *shu fu* are grinded into powder, and taken with Shaoxing wine to treat dysuria after child birth effectively. Decoction of *shu fu* 5g, *che qian zi* 12g, *ze xie* 12g can promote urine obviously.

5) Chronic bronchitis: this disease is quite obstinate and is difficult to be cured. Hongqiao district first hospital of tianjin grind *shu fu* into powder, treat it by 60% alcohol and then make it into tablets (0.3g, 0.5g). 2 to 5 tablets (0.5g), or 3 to 8 tablets (0.3g) are taken every time, three times a day. 15 days compose one course of treatment. 247 cases are treated, and the total effective rate is 81.8%. It is effective to asthma, cough and sputum. *Shu fu* can disperse stasis and activate blood, so it can improve lung microcirculation, promote the recovery, improve lung function so as to relieve cough and asthma. The patients usually feel mouth dry after taking this drug, so tea of *mai dong* 10 can be taken with drug.

6) Pain after surgery: *shu fu* has analgesic and anticonvulsant actions, so it can relieve pain after surgery. *Shu fu* is washed, killed by warm water, dried,

grinded into powder, mixed with sugar and amylum, made into 10% powder and then put into capsules^②. Every capsule contains 0.1g of *shu fu*. 2 to 4 capsules are taken every time, once to twice a day. *Shu fu* is washed, mixed with water (1:15 or 1:20), and then decocted into 10% decoction. The solution is filtered by three layers of gauze. Proper dose of antiseptic is added. 5 to 10ml is taken by oral administration every time. It has obvious analgesic and anticonvulsant actions for the pain after surgery.^③

[case] patient *Zhao*, male, 54, worker. He received surgery because of intestine obstruction and felt abdomen pain after surgery. He was prescribed *shu fu jiao nang*, 4 capsules every time. The pain began to be relieved after 1 hour. The pain was completely relieved by another administration after 4 hours.

1\ Date Selection of Chinese New Herbal Therapy Exhibition, 1970

2\ Date Selection of Chinese New Herbal Therapy Exhibition

3\ Guangxi drug animal, Guangxi people republic house, 1976

22 *Qi Cao*

Qi chao is larva of *Holotrichia diomphalia* Bates, *Anomala corpulenta* Motschulsky, *Anomala exoleta* Faldermann and *Holotrichia parallela*. It is about 15 to 35mm long, its shape is long column, its color is milk white, and the body usually is bended and covered by yellow-white hair. There are three sections of chest, and every section has two feet. They live in the earth about 3 to 6 cm deep, and bite plant root. They are injurious insect. It is produced in Jiangsu, Anhuim Guangdong, Guangxi, Sichuan, Shandong, He'nan provinces. Many herbal books consider *qi cao* and *qiu qi* as the same insect, and there are still some people consider them as the same insect. It is wrong. Doctor *Chen Cangqi* says in "*ben cao shi yi*", *qiu qi* is also called *du*, it lives in rotten wood, it has a long body short feet, black mouth and no hair, it becomes into longhorn beetle after *chun yu*. Therefore, *qiu qi* is larva of longhorn beetle, while *qi cao* is larva of scarab.

Its other names are *di can*, *fei qi* and *pen qi*. Some doctors think its nature is slight warm, and some think its nature is slight cold. Seeing from that there is sweat after taking *qi cao*, "*ben jing*" is right that is salty in flavor and slight warm in nature. It is attributive to liver meridian. Its functions are dispersing blood stasis, dredging stasis obstruction, treating trauma and stopping spasm due to injury. In "*ben cao gang mu*", doctor *Li Shizhen* says, "*ben shi fang*" uses *yang xue di huang wan* which contains *qi cao* to treat spasm, because *qi cao* can dredge blood stasis and stasis obstruction. In "*jing yan fang*"; doctor *Chen* says, cooked *qi cao* can treat loss of eyesight, which is coincided to "*ben jing*" (using it to treat nebula) and "*yao xing lun*" (using its juice to treat nebula); "*ying tong bai wen*" uses it to treat tetanus, bone fracture, severe ulcer, weapons injury, pain and blood disease. Because it can activate blood and eliminate stagnation, it is effective to these diseases. However, the function of abating nebula is not good. The author agrees to doctor *Zhou* ^①. He says, treating nebula by *qi cao* is seen in "*ben jing*" and "*yao xing ben*

cao”, and doctor *Chen* quotes the case in “*jin shu*” that drudge cooks *qi cao* without permission to feed *sheng chong mu* who has loss sight because of grudge between them and *sheng chong mu* is cured unexpectedly as evidence; if only *qi cao* is used, no therapeutic effect comes up. Facing ancient doctors’ opinions, we have to test them by practice. We should not accept them without analysis.

“*chang sha yao jie*” ② says, *qi cao* can disperse blood stasis and eliminate mass; the reason why “*jin kui*” *da huang zhe chong wan* uses it to treat abdominal distention and blood stasis is that it can break stasis to eliminate mass. This is a pertinent comment.

In “*ben jing su zhu*”, doctor *Zhou Run’an* says, the drugs for dispersing stasis what doctor *Zhang Zhongjing* uses are more than 20, but only dark eyes of dry blood syndrome is treated by *qi cao*; if later generations mast it and can follow it, *qi cao* would not be mistakenly used.

Additionally, it is also effective to acute throat obstruction and excessive amenorrhea.

Because of its fierce function of breaking blood and dispersing stasis, pregnant women, weak patients and no blood stasis are contraindications. The dose usually is 0.5 to 1g for one day for powder and pills. It can be pounded or grinded into powder for external use. The clinical applications are:

1) Throat obstruction (*hou bi*): it refers to throat diseases with swelling and pain throat. It can be caused by external and internal factors. External factor usually is wind-heat, and the onset is quick. Internal factor usually is *yin* deficiency, and it is obstinate and can be cured quickly. “*ji yan fang*” uses juice squeezed from live *qi cao* to drop throat obstruction, and the disease is cured every quickly. This is a acute throat obstruction resulted from external factors. “*za bing yuan liu xi zhuo*” says, *hou bi*, of which *bi* means obstruction, must swelling with obstructed throat , it is caused by wind phlegm, fire stagnation and heat toxin. The author once used it and the functions of eliminating swelling and relieving pain is quite quick when he did mobile medical work in village.

[case] patient *Xu*, male, 39, farmer. He suffered aversion to cold, fever, throat pain two days before. Swelling became severe later. Now he felt obstruction sensation in throat. He was asked to find some live *qi cao*, pound them to make juice, drop some juice into throat. A moment later, much saliva was discharged out and he had frequent vomiting. Later the throat swelling was eliminated gradually.

2) Tetanus: in light of “*ying tong bai wen*”, contemporary doctors use *qi cao* to treat tetanus, receiving good therapeutic effect ③. 14 cases are treated, among which 11 cases are cured, and 3 cases died. The patient could open mouth freely, throat spasm is eliminated or disappeared, mouth secretion is reduced obviously, and could swallow food and drugs after 15 to 30 minutes. The tic could be relieved by drugs but could not be completely relieved, so other therapies are also need. 3 dead cases are old and weak patients

accompanied with dysfunction of lung. Method: *qi cao* is lift downward to let it vomit yellow water (the tail can be cut to let yellow water out in critical condition.). The yellow water is used to cover the focus, making the focus numbness and patient sweat. The water can be used to wipe gum for lockjaw. *Qi cao* also can be pounded and used to cover the focus, and changed when it is dry. Or 10 *qi cao* is baked and grinded into powder, taken by two times with Shaoxing wine (reduced dose for children). These methods can be used together.

Comment: oral administration and external use of *qi cao* can treat tetanus, because it can activate blood, disperse stasis, resolve toxin and stop spasm. If the spasm or tic can not be controlled quickly, *xie wei 4*, *wu gong 4*, *fang feng 9g*, *tian ma 12g* are grinded into powder. 6g is taken with old wine, three times a day. The therapeutic effect is quick. It should be used early for severe case to promote effect.

3) *Li jie feng*: one kind of Bi syndrome, also called *bai hu feng*, *bai hu li jie*. Because of severe and wandering joint swelling, mild in daytime and severe in night, it belongs to pain obstruction (*tong bi*) and wandering obstruction (*xing bi*). *Qi cao san* of “*sheng ji zong lu*” is effective. *Qi cao 7* (pounded), *gan cao* (baked, grinded into powder) 15g, *zhi mo yao* (grinded into powder) 3g, *zhi ru xiang* (grinded into powder) 3g are pounded. They are taken by two times with Shaoxing wine, twice a day. It can eliminate pain and relieved pain.

[case] patient *Wang*, male 47, worker. He suffered *li jie feng* for about 4 to 5 years. The manifestations were swelling joint pain, wandering pain, alternation of mild and severe, severe in night, thin and greasy coating, purple tongue, and wiry and thin pulse. It was wind, clod and dampness going into meridians accompanied with stasis. Expelling wind and cold, dredging obstruction and dispersing stasis were applied. *Qi cao san* of “*sheng ji zong lu*” was tried.

Pain was relieved obviously, swelling was also relieved, and purple tongue was slighter after taking drugs. They were good signs. The formula was used continuously. When the condition was steady, decoction according to syndrome were used.

4) Hepatitis: there are many types of hepatitis, and heat-dampness stagnation, liver oppression and spleen deficiency, liver blood stasis and deficiency of liver and kidney are common seen types. It is treated according to syndromes. Activating blood, dispersing stasis, softening hardness and eliminating stagnation are used for liver blood stasis. *Qi cao* is good at dispersing stasis and eliminating mass, so it is suitable for this type. It is used for decades of cases of hepatitis when it is prevalent during 1960 to 1962. It can disperse stasis and eliminate mass, so it can effectively reduce enlarged liver and spleen and relieve hypochondrium pain.

[case] patient *Yu*, male, 36, cadre. He suffered non-jaundice hepatitis for more than five months. The manifestations were dark complexion, fatigue, poor appetites, enlarged liver and spleen, prickly hypochondrium pain, distention pain sometimes, purple tongue, stasis spots in the edge of tongue,

thin and greasy coating, deep and rough pulse. It was liver and spleen stagnation, blood stasis, so soothing liver and dispersing stasis to treat mass.

Qi cao 60g (washed, dried in sunshine) are grinded into powder and put into capsules, one capsule every time, twice a day.

The hypochondrium pain was stopped, appetite was promoted, and the spirit was good after taking drug for one week. The enlarged liver and spleen were reduced, purple color and stasis spots were became better, and rough pulse became smooth after two weeks.

5) Amenorrhea: *qi cao* can be selected to treat excessive amenorrhea with lower abdominal distention, purple tongue or stasis spots in the edge of tongue. *Qi cao* alone is effective, or assisted by drugs for regulating menstruation and activating blood.

[case] patient *Wang*, female, 28, worker. He suffered amenorrhea for four months. The manifestations were lower abdominal distention, weak waist, much leucorrhoea, thin coating, purple tongue, rough pulse. It was excessive amenorrhea, and the treatment methods were dispersing stasis and dredging meridians.

Qi cao 20g, *chuan xiong* 60g are grinded into powder and put into capsules, four capsules every time, twice a day. They were taken with Shaoxing wine.

After taking the drug for 8 days, abdominal pain became severe. After taking for another two days, the menstruation with purple color and gore came up and abdominal pain disappeared. Then she was treated by *xiao yao wan*, 8g both in the morning and evening.

6) Pain due to trauma: trauma usually injuries collaterals, make bleeding and stasis obstruction. Obstruction results in pain. *Qi cao* is good at activating blood, dispersing stasis, treating injury and relieving pain. Therefore, it is suitable for this.

[case] patient *Jin*, male, 47, worker. He fall down from high place and resulted in livid purple tissue and pain on shoulders and outboard legs. Examinations confirmed no bone fracture. The coating was thin and greasy, and the pulse was wiry. Trauma injured collaterals and vessels and resulted in stasis stagnation. The treatment methods were activating blood, eliminating stasis, treating injury and relieving pain.

Qi cao 30g, *shen san qi* 30 are grinded into powder, and put into capsules, 3 capsules every time, twice a day. They are taken with old wine.

The pain was stopped and livid purple color disappeared after taking drug for 3 days.

Comment: *shu fu* and *qi cao* are drugs for dispersing stasis, dredging meridians, stopping spasm and relieving pain. *Shu fu* is slight cold in nature, and can also clearing heat, resolving toxin, promoting urine and treating retention of urine. *Qi cao* is slight warm, and is good at stopping spasm, dredging obstruction, eliminating distention and treating injury. There are differences in the same functions. They should be selected according to syndrome. It should be careful when it is used for pregnant women and weak

patients.

1\ Chinese Pharmacology Dictionary, 1935

2\ quoted form TCM Dictionary, Shanghai people public house, 1977

3\ Shandong medicine Journal (4): 49, 1972

23 wu ling zhi

Wu ling zhi is dried stool of *Trogopterus xanthipes* Milne Edwards, and it is also called *han hao chong fen* and *han que fen*. It is mainly produced in Guangxi, Hebei, Shangxi, Yunnan, Fujiang and Guangdong provinces. It is slight warm in nature, bitter and sweet in flavor, and attributive to heat, liver and spleen meridians.

It is first recorded by “*kai bao ben cao*”, and the functions in the book are treating coldness in heart and abdomen, infantile malnutrition, pestilence, intestine wind, dredge *qi* meridian and menstruation. “*ben cao gang mu*” replenishes its functions and elucidate the theory.

Wu ling zhi is good at going into blood to activate *ying qi*, and can ascend turbid *qi* to harmonize *yin* and *yang*. Many functions can be extended from this. It can be used for hear, abdomen and hypochondrium pain due to *qi* stagnation and blood stasis, excessive amenorrhea, abdominal pain due to stasis after child birth, dysmenorrheal, abdominal pain of diarrhea, stagnation of phlegm and stasis, infantile malnutrition, swelling tongue, throat obstruction, swelling and pain of bone fracture and so on. In many chronic diseases, abdominal distention and pain due to stagnation of phlegm and stasis, indigestion and turbidity can be used by *wu ling zi*. Stir-baked form can stop bleeding and astringe uterus bleeding, is suitable for uterus bleeding, much menstruation, red leucorrhea, bloody dysentery and intestine wind. Powder for external use can treat acute ulcer and snake, scorpion and centipede bite, etc..

Wu ling zhi is good at activating blood, dispersing stasis, and dredging blood vessels. Therefore, doctors use it to treat heart angina effectively. Extending from eliminating phlegm and stasis, it is used to treat pulmonary emphysema.

Wu ling zhi is restricted by *ren shen*, but doctor *Zhang Wanshi* says, combination use of *ren shen* and *wu ling zhi* can dredge blood and is a good formula for *xue gu*. “*ben jing feng yuan*” points out that *si wu tang* added with *ren shen* and *wu ling zhi* can treat amenorrhea. Doctor *Zhang Cigong* often uses *wu ling zhi* with drugs for promoting *qi* circulation and regulating stomach for stomach ulcer, with *hei chou* (named *ling chou san*) for dysentery or abdominal distention due to indigestion, with drugs for promoting *qi* circulation for intestinal spasm and intestine narrow, with drugs for activating blood and dredging meridians for amenorrhea and delayed menstruation with abdominal pain, with drugs fro dispersing stasis and promoting *qi* circulation for dysmenorrheal, with *cao xian shen* for stomach pain with severe hematemesis. *Shi xiao san* is used for abdominal mass after child birth. Doctor *Zhang Wanshi* and *Zhang Cigong* are good at using *wu ling zhi*. It is worthy learning.

“*ben shi fang*” uses *wu ling zhi* with *ru xiang* and *mo yao* to compose *tie dan yuan*, and with *cao wu* to compose *hei shen wan* for paralysis. “*ji sheng fang*” uses it with *yuan hu*, *e zhu*, *liang jiang*, *dang gui* to compose *yu tong san* for acute heart pain and stomach pain. “*chong ding guang wen re lun*” puts *wu ling zhi* and *sha ren* into abdomen of live *chan chu*, covers them with earth, calcines them and grinds into powder for *qi* distention, *qi gu*, big abdomen of infantile malnutrition, chest oppression and abdominal pain of women, etc.. It is quite effective. *Shi xiao san* of “*tai ping hui min he ji ju fang*”, composed of *wu ling zhi* and *pu huang*, is a famous formula for abdominal pain due to blood stasis. *Shi xiao san* can activate blood, disperse stasis, eliminate stagnation and relieve pain, and can be used for heart pain, stomach pain, irregular menstruation, lower abdominal pain, abdomen pain after child birth, and retention of lochia.

Wu xiang wan is composed of *wu ling zhi* 500g, *xiang fu* 500g, *hei chou* 100g, and *bai chou* 100g. They are grinded into powder. After half of them are stir-baked, it is mixed with another half. They are made into pills as large as radish seeds with vinegar. 3g is taken with *sheng jiang tang* before sleep. It can be used for phlegm, food, water and dampness stagnation, *qi* stagnation, blood stasis, phlegm confusing heart to eliminate phlegm, dispersing stasis, promoting urine, eliminating distention and stagnation, and relieve pain. It can be used for both acute and chronic diseases. The author once used it to treat chronic bronchitis, dyspepsia, stomach pain due to hyperactivity of liver *qi*, edema, beriberi, dysentery, dysmenorrheal, irregular menstruation, etc.

Wu ling zhi contains resin, carbamide, uric acid and Vitamin A. it has certain effect to mouse experimental tuberculosis^①, water lixivium (1:2) can inhibits many kinds of fungus in different degrees in tuber^②. It also can relieve spasm of smooth muscle and increase WBC^③.

Foreign substance and rash should be removed before it is used as drug. If it is stir-baked with vinegar, it is called *chu ling zhi* for stopping bleed. If it is stir-baked with wine, it is called *jiu ling zhi* for activating blood, not only reducing fishy smell and promoting therapeutic effect. It should be careful when it is used for pregnant women and the patients without blood stasis. The dose is 6 to 10g for decoction in one day, and the dose is reduced properly when it is used for pills and powder. The clinical applications are:

1) *Er zhen tong*

The pain results from uterus contraction after child birth is called *er zhen tong*, also called *gong suo tong*. The pain usually disappears after 3 to 5 days. Slow recovery or severe pain needs treatment. As for syndrome differentiation, coldness invades the body and fights with blood, or stasis in uterus, manifesting as cold limbs, abdominal pain which is aggravated by pressure and relieved by warm, white and slippery coating, deep and rough pulse, or thin and rough pulse. Activating blood, dispersing stasis, warming meridians, expelling cold are applied, and *sheng hua tang* added with *shi xiao san* is selected. The effect is quick. Or *wu ling zhi* is stir-baked, mixed with

vinegar, and stir-baked again until the drug smell gives out, and then grinded into powder. 6g is taken with Shaoxing wine, three times a day. It is cured after 1 to 2 days ④.

[case] patient *Shi*, female, 28, worker. She suffered abdominal pain 3 days after child birth. There was a touchable mass in lower abdominal. It was *er zhen tong* due to cold stagnation and blood stasis. The tongue coating was white, and pulse was thin. *Wu ling zhi* powder was prescribed, 6g every time, three times. It was cured next day.

2) Dysmenorrheal: dysmenorrheal is a common disease of women. It is characterized as pain during menstruation or around menstruation, and can be subdivided into cold, heat, deficiency, excess type. Cold type is treated by warming meridians and expelling cold; *qi* and blood deficiency is treated by nourishing *qi* and blood; *qi* stagnation and blood stasis type is treated by activating blood, promoting *qi* circulation, dispersing stasis and relieving pain. *Shi xiao san* is effective formula. *Tong jing tang*, made by affiliated hospital of Hubei TCM college, can activating blood, dispersing stasis, promoting *qi* circulation and relieve pain. It is composed of *shi xiao san*, *dang gui*, *chuan xiong*, *dan shen*, *xiang fu*, *bai shao*, *tao ren*, *jiu xiang chong*. The therapeutic effect is better than *shi xiao san*.

[case] patient *Qian*, female, 25, worker. He suffered abdominal pain for 3 to 4 days during menstruation. The pain disappeared gradually after menstruation. She often received *zhi tong pian* and acupuncture. The menstruation was dark purple with gore. The coating was thin, tongue was purple, and the pulse was deep and wiry. It was *qi* stagnation and blood stasis. The treatment methods were activating blood, promoting *qi* circulation, dispersing stasis, and relieving pain. Four doses of *tong jing tang* were prescribed. She was asked to take the decoction 4 days before the menstruation. The abdominal pain did not come up after taking drugs. She was asked to take another four doses before next menstruation.

3) Angina pectoris

Angina pectoris is similar to *zhen xin tong*, *xiong bi xin tong*, usually manifests as *qi* stagnation and blood stasis. Therefore, activating blood and dispersing stasis are main treatment principle. Obstinate and longy cases usually manifest as *qi* deficiency and blood stasis or root deficiency and branch excess. So drugs for supplementing *qi* are added. First affiliated hospital of Shanxi medical college uses modified *shi xiao san* to treat 46 cases of angina pectoris, receiving obvious effect with 88.6% of total effective rate. The author usually the formula added with *sheng huang qi* 15g and *tai zi shen* 15g.

[case] patient *Qin*, male, 58, cadre. He suffered angina pectoris for 5 years. It reoccurred frequently, and was reduced over-work and emotional suppression. The coating was thin, tongue was purple, and the pulse was thin and rough. ECG: abnormal ST-T. It was *xiong bi xin tong* due to *qi* deficiency and blood stasis, obstruction of heart vessel. Modified *shi xiao san* was used.

Wu ling zhi 9g, sheng pu huang 9g, chuan xiong 9g, tao ren 9g, hong hua 9g, yu jin 9g, chi shao 9g, sheng huang qi 15, tai zi shen 15g, decoction, one dose a day. It was taken for one month continuously.

Reexamination showed nearly normal ECG. There was no reoccurrence of angina pectoris, and condition was steady. Therefore, one dose of formula was taken every two days. It was clinical cured after two months.

4) *fei zhang* (pulmonary emphysema)

Pulmonary emphysema usually follows after chronic bronchitis and asthma. The lung is tumefacient, ancient doctors name it *fei zhang* according to symptoms, although there was no chest X ray. It is quite precise. They create wrinkling-lung method, and make *zhou fei wan* treating the disease effectively. "*bai yi xuan fang*", "*sheng ji zong lu*", "*shi yi de xiao fang*" and "*pu ji fang*" record *zhou fei wan* to treat longy cough, asthma, bloody sputum. "*pu ji fang*" points out clearly that *zhou fei wan* can treat cough, *fei zhang*, and short breath after activity. It is complete coincided to symptoms and treatment of pulmonary emphysema. The formula is *wu ling zhi 100g, bai zi ren 25g, hu tao 8* (without shell). They are made into pills, taken with decoction of *gan cao*, 15 pills every time, twice a day. It can disperse stasis, eliminate phlegm, wrinkle lung and supplement kidney, is effective to mild case of pulmonary emphysema.

[case] patient *Fang*, female, 61, farmer. He suffered chronic bronchitis for long time, and it was severe in winter. In the recent years, it reoccurred frequently, he had cough and short breath which were severe after activity, and chest oppression. Chest X ray: increased brightness of lungs. The coating was thin and greasy, the tongue was purple, and the pulse was thin. It was *fei zhang* due to deficiency lung and kidney, obstruction of phlegm and stasis. She was prescribed two doses of *zhou fei wan*, 15 pills every time, twice a day. The cough, chest oppression and short breath were improved after two weeks. She was asked to take *zhou fei wan* in the morning and take *he che da zao wan 6g* in the evening. She recovered gradually.

5) Ectopic pregnancy

Ectopic pregnancy belongs to excessive type of blood stasis in lower abdomen. Except that shock due to loss of *yang qi* because of sudden loss of *yin* blood need be rescued by combination of TCM and western medicine, others can be treated by activating blood and dispersing stasis, such as *shi xiao san* added with *huo luo xiao ling dan*, or *shi xiao san* added with *jiao ai tang* without *gan cao*. It is reported ⑤ that *shi xiao san* added with *jiao ai tang* without *gan cao* has been used to treated 18 cases of ectopic pregnancy, among which 16 cases are chronic, 2 cases are sub-acute. They are all cured after taking 10 to 20 doses of drugs.

[case] patient *Zhao*, female, 30, farmer. After amenorrhea for more than 2 months, she suddenly suffered left lower abdominal pain with tenderness, rebound tenderness and unobvious muscular tension. There was a little dark blood flowing from vagina, and urine TT test was positive. She was diagnosed

as ectopic pregnancy. The coating was thin, and the pulse was wiry and thin. It was excess syndrome of lower abdominal stasis due to blood leaving from vessel and staying in lower abdomen. The treatment methods were activating blood, dispersing stasis, eliminating mass and relieving pain. Four doses of *Shi xiao san* added with *huo luo ling xiao dan* were prescribed.

The pain was stopped and the mass was reduced a little after drugs. Then she was cured by another five doses.

6) Poisonous snake

Wu ling zhi can dispersing stasis, relieve pain and resolve toxin, and is effective to poisonous snake if it is assisted by *xiong huang* which is good at resolving toxin of snake and insect bite. It is reported ⑥ that the formula has cured 10 cases of snake bite. Increased dose of the formula and other treatments according to syndrome and symptoms are used for snake toxin going inside resulting in high fever, delirium and mania in some cases.

[case] patient *Sun*, female, 42, farmer. His left feet back was bite by pallas pitviper when he was working in the farm. The pain was extremely fierce, and the swelling began to extend upward. He had head distention pain and diplopia. *Wu ling zhi* 30g, *fei xiong huang* 15 were grinded into powder. 6g was taken with Shaoxing wine, and also used to cover the focus, three times a day. The wound was enlarged and drained to draw toxin. He was cured after three days.

1\ Chinese Tuberculosis Journal 5(3):488, 1964

2\ Chinese Dermatology Journal 5(4):286, 1957

3\ Chinese Formula and Herbs Science, Guangdong people public house, 1973

4\ Guangdong Medicine, Chinese Medicine edition, 2; 21, 1966

5\ Hu'nan Science and Technology Information (13):29, 1972

6\ Jiangsu TCM (11):33, 1965

24 Ye Ming Sha (subsidiary drugs: *bian fu*)

Ye ming sha is dried stool of *Vespertilio superans* Thomas, and also called *tian shu shi* and *hei sha xing*. The stool is long ellipse with brown color. Brown or yellow-brown insect head, eye and wing with luster can be seen in the broken *ye ming sha* under magnifier. It can be collected all year around, but spring and summer are better. After rash and foreign body are washed by water, *ye ming sha* is dried in the sunshine and sir-baked. It is cold in nature, pungent in flavor, and attributive to liver and spleen.

The functions are activating blood, dispersing stasis, improving eyesight, treating malnutrition and clearing blood heat.

In "*ben cao gang mu*", doctor *Li Shizhen* says, *ye ming sha* and *bian fu* are attributive to blood phase of liver meridian, can activate blood and eliminate stagnation, so they can treat diseases of *jue yin* meridian, such as nebula, poor eyesight, malaria, malnutrition, stranguria, leucorrhea, enlarged lymph node, carbuncle, etc.. The comment is quite complete and intensive. Doctor *Huang Gongxiu* praise *ye ming sha* as a panacea for nebula and poor

eyesight in “*ben cao qiu zhen*”. These diseases usually are caused by liver blood stagnation, while *ye ming sha* can go into liver to activate blood and disperse stagnation, and also good at clearing liver and promoting eyesight, so it is often used for nebula. It is pity that it is little used for malaria, palpitation, enlarged lymph node, stranguria, leucorrhea and dead fetus in later ages.

It contains carbamide, uric acid and a little dose of Vitamin A.

Because it can activate blood, disperse stagnation, and reduce dead fetus, pregnant women are contraindications. The dose usually is 6 to 10g for decoction, 2 to 3g for powder and pill and proper dose of external use. The clinical applications are:

1) Nebula: it refers to cataract, cornea nebula, etc.. It can be subdivided into deficiency and excess syndromes. The excess syndrome is usually caused by wind and heat in liver, and should be treated by expelling wind, clearing heat, resolving toxin and reducing liver. The deficiency syndrome is usually caused by deficiency of liver and kidney, hyperactivity of fire due to *yin* deficiency, and should be treated by nourishing liver and kidney, clearing heat and descending fire. If it is caused by trauma, treatments should be applied by special department. But promoting eyesight and abating nebula should be used as main method in later stage. *Ye ming sha* is a preferred drug to clear heat, promote eyesight, activate blood and abate nebula. It can be used alone or with other drugs according to syndrome differentiation. The author often uses *zhi nei wai zang yi fang* of “*zhi zhi fang*”. *Ye ming sha* 6g and fresh pig liver 50g are decocted to drink the juice. Continuous intake can abate nebula and promote eyesight.

[case] patient *Shi*, male, 46, worker. Due to wind and fire in liver meridians going upward, he often suffered red eyes, aversion to light, and then nebula and poor eyesight affecting work. Eye test showed cornea nebula. The tongue was red with little coating, and the pulse was wiry and slight rapid. *Zhi nei wai zang yi fang* of “*zhi zhi fang*” was prescribed. After taking drugs for 10 days, the nebula was abated a little. After one month, the eyesight was promoted. He was cured by more than 70 days.

2) *Que mu*: it is nyctalopia, and also called *que mu nei ang* and *ji mang* in ancient time. It is common seen in children, so it is also called *xiao er que mu*. The patients can not see clearly in the evening or dark places. It is usually caused by malnutrition because of deficiency of liver and spleen. The treatment methods are nourishing liver, supplementing spleen, killing parasite and eliminating malnutrition. *Fei er wan* added with *ye ming sha* or power of *ye ming sha* and pig liver (cooked together) is effective.

[case] patient *Li*, male, 7. In the recent years, he suffered fever, diarrhea for many times. Dysfunctions of stomach and intestine caused thin body, dry eyes, poor eyesight in the evening, thin coating and thin pulse. It was *ji mang*. It usually is caused by liver blood deficiency. Nourishing liver and promoting eyesight were used.

Ye ming sha 30 was grinded into powder. 2g of powder is taken with 50g of pig liver in one day. He was asked to enhance nutrition and bask. He was cured after one month.

Subsidiary Drugs: *Bian Fu*

Bian fu is also called *tian shu*, *xian shu* and *fei shu*. In “*ben cao gang mu*”, doctor *Li Shizhen* points out that, *bian fu* is suitable to be used as drug, but not food. Because of its reducing function, the dose must be controlled. The drugstores do not have *bian fu*, it can be caught in summer and autumn. After the hair, ckaw and internal organs are removed, *bian fu* is dried in the sunshine or dried by exposure to the air. Its baked form is used for pills and powder. it is salty in flavor, mild in nature, nontoxic and attributive to liver meridian.

Ancient herbal books consider that it can promote eyesight, treat stranguria, dredge water channel and treat leucorrhea. It is little used for these diseases in later ages, but doctors in later ages agree with doctor *Li Shizhen*'s opinion—it can treat longy cough, abnormal ascending of *qi*, enlarged lymph node, weapons wound and convulsion. It is usually used for longy cough and asthma.

25 *Sang Piao Xiao*

Sang piao xiao is egg pouch of mantis. The egg pouch on the mulberry braches (*sang shu*) is better, so it is called *sang piao xiao*. After it is collected in later autumn or next spring, it is steamed for 30 to 40 minutes to kill egg, and then it is dried in the sunshine or dried by fire. It is mild in nature, salty and sweet in flavor, and attributive to liver and kidney meridians.

Sang piao xiao is common used drug for supplementing kidney, tonifying *yang*, astringing essence, stopping nocturnal emission, reducing urine and relieving leucorrhea. “*ben jing*” says, it can treat middle-*jiao* injury, hernia, importance, amenorrhea and can increase spermatozoon. “*bie lu*” completes it and says, it can treat male consumption, *qi* deficiency of five organs, nocturnal emission and enuresis. It is suitable for kidney *yang* deficiency of enuresis, frequent urine, leucorrhea, nocturnal emission, premature ejaculation, importance, etc.. Therefore, doctor *Li Shizhen* says, *sang piao xiao* is a drug for liver, kidney and life-gate, and ancient doctor often used it. Doctor *Kou Zongkui* considers it as a indispensable drug for consumptive diseases, importance due to kidney *yang* deficiency, nocturnal emission, enuresis, white and turbid urine and hernia. The reason why it can treat stranguria and dredge urine channel (“*ben jing*”) is that these diseases are caused by kidney *qi* deficiency. If kidney *yang* is tonified, *qi* transformation is normal. So, *sang piao xiao* can reduce urine, treat stanguria and promote urine.

Because of the functions of supplementing kidney and tonifying *yang*, scanty and frequent urine, yellow and thin leucorrhea and nocturnal emission due to hyperactivity of fire due to *yin* deficiency or heat-damp in lower-*jiao* are contraindications. The dose usually is 10g for decoction, and 1 to 2g for pills

in one day. The clinical applications are:

1) Enuresis: infantile occasional enuresis usually is caused by disordered diet, too be fond of play and fatigue. It is not a disease. But longy and continuous enuresis is caused by weak constitution, deficient cold of lower-*jiao* and unconsolidated bladder *qi*. The treatment methods are warming kidney and astringing urine. It can be effectively treated by *sang piao xiao* added with *suo quan wan* (*wu yao, yi zhi ren*). It can be also used for adult enuresis, for example, *sang* wine-stir-baked *piao xiao* is grinded into powder and taken with 2 *qian* of ginger soup in “*qian jin yi fang*”. *Sang piao xiao* 12 is pounded and taken with rice soup by two times for enuresis of pregnancy in “*chan shu fang*”. These all are own to functions of supplementing kidney and astringing bladder.

[case] patient *Xie*, female, 12. She had weak constitution and frequent enuresis. The manifestations were yellow complexion, thin body, fatigue, frequent and clear urine in daytime, enuresis once or twice in night, thin coating, pale tongue, and thin and weak pulse. It was caused by kidney *yang* deficiency and unconsolidated lower-*jiao*. The treatment methods were warming kidney and astringing bladder.

Sang piao xiao 30g, *tai wu yao* 30g, *yi zhi ren* 30g, *zhi feng fang* 30 are grinded into powder, 5g every time, twice a day. The enuresis was stopped after taking drugs for one week. Later, the drugs were taken once in the evening to enhance the therapeutic effect.

2) Nocturnal emission, white and turbid urine and night sweating in consumptive diseases: nocturnal emission, night sweating (or spontaneous sweating) and white and turbid urine are all symptoms of consumption. *Sang piao xiao* can supplement kidney, tonify *yang*, strengthen body and astringe body fluid, so it is suitable for these diseases. In “*wai tai mi yao*”, baked *sang piao xiao* and *bai long du* with the same dose are grinded into powder. 2g is taken with salt soup before meal. It is effective to these diseases.

[case] patient *Lei*, male, 38, worker. He once had lung tuberculosis. In the recent years, he was extreme thin, and had night sweating, even spontaneous sweating sometimes, aversion to cold, poor appetite, frequent nocturnal emission, and spontaneous seminal emission, thin coating, and thin pulse. These were symptoms of consumption, and the treatment methods were strengthening kidney and astringing body fluid

Sang piao xiao 90g, *duan long gu* 90g are grinded into powder, 6g every time, twice a day. The drugs took effect after 5 days. Continuous administration made the disease steady.

3) Importance: importance results from kidney *yang* deficiency. It can be treated by *sang piao xiao* added with drugs for supplementing kidney and tonifying *yang*, because it is drug for liver, kidney and life-gate.

[case] patient *Qu*, male, 29, worker. He once had masturbation and frequent spontaneous emission. After marriage two years ago, he had importance, resulting disharmonious relationship. The manifestations were aversion to

cold, fatigue aggravated by work, pale tongue with little coating, and thin pulse. It was due to deficient kidney *yang* and uncontrolled essence gate. The treatment methods were warming *yang*, nourishing kidney, treating importance, and astringing essence.

Sang piao xiao 15g, gan qi zi 10g, shu di huang 15g, xian ling pi 15g, ba ji tian 12g, dan cong rong 12g, tu si zi 10g, gan cao 4g, ten doses. After taking drugs, the spirit was promoted, spontaneous emission was stopped, penis erected a little after midnight. After taking another ten doses, penis erected nearly normal. He was asked to taking the drugs patiently, keep continence and do proper exercise so as to cure importance completely.

4) Low back pain due to kidney deficiency: *sang piao xiao* added with the drugs for supplementing kidney and strengthening waist is quick effective to low back pain due to kidney deficiency.

[case] patient *Hu*, female, 43, farmer. Due to longy deficiency of kidney and *du* meridian, she suffered frequent severe low back pain which aggravated by work, clear and thin leucorrhea, large tongue, thin coating, and weak pulse. The treatment methods were nourishing kidney, strengthening waist, assisted by astringing vessel meridian.

Xian ling pi 15g, sang piao xiao 15g, zhi feng fang 10g, shu di huang 15g, bu gu zhi 10g, shan yu rou 10g, gan cao 5g, five doses. After taking three doses, the pain was reduced. After taking five doses, the pain was stopped.

5) Frequent urine of old people or deficient patient: frequent urine with large amount and clear texture due to deficient kidney *yang*, uncontrolled fluid can be treated by warming kidney and tonifying *yang*. *Sang piao xiao* added with *fu peng zi, yi zhi ren, bu gu zhi, shu di huang*, etc., can be taken for long time. Frequent urine with small amount and yellow color is due to deficient heat due to *yin* deficiency, and should be treated by nourishing kidney *yin*, and modified *liu wei di huang wan* can be selected. *Sang piao xiao* is not suitable for frequent urine with pain which is due to heat-dampness of stranguria.

[case] patient *fang*, male, 68, worker. He once had pulmonary emphysema. In the recent years, he had frequent urine which was severe in the evening, weak waist and legs, feet edema sometimes, unformed stool, white coating, large tongue, thin and weak pulse. It was due to deficient kidney *yang*. The treatment methods were warming kidney and tonifying *yang*.

Sang piao xiao 60g, bu gu zhi 45g, shu di huang 60g, yi zhi ren 60g, fu peng zi 60g, zhi feng fang 45g, hu tao rou 60g, tu si zi 60g. They were grinded into powder, and 6g was taken with water both in the morning and evening. After half month, the symptoms were improved. The disease was cured by continuous administration.

26 Zha Meng

Zha meng is dried body of *Acrida chinensis* Westm. The body shape and functions of *Oxya chinensis* Thunb and *Oxya velox* Thunb are similar to *zha meng*. All of them can be used as drug. It has long body, yellow-green color, ellipse compound eye, three stemmas on the head, thin and long antennas,

thin wings, six feet, and extreme long hind legs. It is good at jumping. They usually live in the field and eat leaves of plant, and are agriculture injurious insect. It is produced by every province. But drugstores do not sold them. They must be caught in autumn, and dried. It is pungent and sweet in flavor, warm in nature. "*ben cao gang mu*" considers it is toxic. It is wrong. Some people eat them after baking them with oil, and do not have toxic symptoms. It is attributive to lung, liver and spleen meridians.

The folk usually uses it to treat convulsion, pertusis, asthma, dyspepsia, etc.. It is usually used alone, or can be used with other drugs according to syndrome differentiation. The dose is 10 to 20 for decoction in one day, and 3g for powder (*zha meng* is calcined and grinded into powder.). They are taken by two times. The dose is reduced for children. The drug is mild in nature and has no side effect. The clinical applications are:

1) Convulsion

Infantile high fever is easy to result in convulsion. *Zha meng* is good at expelling wind and stopping spasm. "*bai cao jing*" uses decoction of 7 to 10 *zha meng*, *bo he* 3g (expelling wind and clearing heat) and *gou teng* 3g (clearing liver and stopping spasm) to treat this disease. They are coincided to pathogenic mechanism. The author once used this formula added with *guang di long* 5g, grinded them into powder and named it *xi feng ding jing san*, 3 to 5g every time, three times a day. The administration is convenient and the therapeutic effect is better.

[case] patient *Xu*, female, 6. She suddenly suffered high fever yesterday. The manifestations of that day were frequent convulsion, even superduction, lockjaw, unsmooth sweating, slight yellow coating, and rapid pulse. It was heat resulting in wind. *Xi feng ding jing san* was prescribed, 4g, three times a day. The heat was abated and convulsion was stopped next day. Then she was regulated.

2) Pertusis

Its popular name is *dun ke*, manifesting as obstinate spastic cough. *Zha meng* is not only at resolving spasm, but also stopping cough. Therefore, *zha meng* is common used to treat pertusis in country.

[case] patient *Jia*, male, 5. He suffered cough for more than ten days, and was not cured by treatments. The manifestations were frequent and continuous cough, even red complexion and suffocate which was relieved by deep inhalation, vomiting with phlegm and saliva or food sometimes, thin and greasy coating, slippery and rapid pulse. It was pertusis. 10 *zha meng* is decocted in one day. After taking drug, the cough was reduced a little. After taking drug for 4 days, it was cured.

3) Bronchus gasp

The outbreak of this disease manifests as bronchus spasm, resulting in dyspnea, asthma, rapid breath and suffocate. *Zha meng* can relieve spasm and stop asthma, so it is suitable. In "*xian dai shi tong zhong yao*", doctor *Ye Juquan* introduces his experience on treating bronchus gasp and spasmodic

cough by *zha meng*. *Zha meng* 30, *ma huang* 3g, *gan cao* 3g, and water 500ml are decocted into 200ml of decoction which is taken by two or three times in one day. Its therapeutic effect is good. It is worthy referring.

27 Wu Bei Zi (subsidiary drugs: bai yao jian)

Wu bei zi is insect gall of *Melaphis xhinensis* (Bell) on *rhus chinensis*, and also called *wen ge* and *bai chong cong*. They are collected during September and October when insect galls become red without splitting. They are put into boiling water for 3 to 5 minutes to kill aphids in the galls, and then dried in the sunshine or dried by fire. It is produced in the provinces which have *rhus chinensis*, Sichuan and Guizhou in particularity. It is mild in nature, salty and astringent in flavor, nontoxic and attributive to lung, stomach and large intestine meridians.

“*ben cao gang mu*” describes its functions in detail. It records that *wu bei zi* can astringe lung, descend fire, eliminate phlegm and fluid, stop cough, treat diabetes, stop night sweating, treat vomiting, bleeding, longy dysentery, jaundice, heart and abdomen pain, infantile night crying, white hair, marginal blepharitis, swelling toxin, throat obstruction, ulcer, weapons wound, prolapse of anus, and prolapse of uterus. Due to *wu bei zi* is crystallization of *Melaphis xhinensis* (Bell) absorbing the fluid of *rhus chinensis*, its functions is similar to *yan fu mu* (*rhus chinensis*).

The functions of *wu bei zi* are wide, and they can be summarized as (1) astringing lung and stopping cough: longy cough due to lung deficiency; (2) stringing intestine: chronic dysentery; (3) stringing collateral and stopping bleeding: all kinds of bleeding; (4) stopping sweating and essence: night sweating, spontaneous sweating, nocturnal emission and spontaneous emission; (5) ascending prolapse: prolapse of anus and uterus, etc.; (6) resolving toxin and treat ulcer: all kinds of ulcer, swelling toxin, red eyes, skin ulcer, and fugu toxin.

Wu bei zi mainly contains chinese gallotannin, and also gallic acid, fatty, resin, waxiness, amyllum, etc.. It can has common actions of tennin, making local tissue protein of skin, mucous, ulcer, etc., solidified so as to play astringing function, and accelerating blood coagulate so as to stop bleeding, making alkaloid precipitate so as to resolve toxin. *Wu bei zi* can inhibit or kill *Staphylococcus aureus*, *streptococcus*, *pneumococcus*, *Salmonella paratyphi*, *dysentery bacillus*, *anthrax bacteria*, *diphtheria bacillus*, *Pseudomonas aeruginosa*, etc..

Because of its powerful astringing function, it is not suitable for acute cough and dysentery, and constipation.

It is suitable for oral administration and external use. It is usually used as pills and powder. The dose is 2 to 5g for one day. It can be decocted to fumigate and wash the focus, or grinded into powder to cover the focus.

1) Night sweating and spontaneous sweating: there are many causes for night sweating and spontaneous sweating. The treatments should depend on syndrome differentiation. *Wu bei zi* can stop thirst and sweating, and descend

fire and nourish fluid. So it is most suitable for *yin* deficiency, such as night sweating due to lung tuberculosis, infantile spontaneous sweating, etc.. *Wu bei zi* is grinded into powder. 3g is mixed with warm water, made into paste, used to cover navel and then covered by gauze. It is used for 3 to 5 days. It can stop being used when the drug takes effect.

[case] patient *Shan*, male, 37, worker. He suffered lung tuberculosis for more than 4 years. He had frequent spontaneous sweating and night sweating, thin coating, slight red tongue, thin and wiry pulse. It was due to failure of *yin* to control *yang*. *Wu bei zi* powder was prescribed to cover navel to astringe *yin* and descend fire. The symptoms were relieved after 3 days, and cured after another 2 days.

2) Spontaneous emission and nocturnal emission: emission without dream is called spontaneous emission, and emission with dream is called nocturnal emission. Doctor *Shen Jin'ao* says, spontaneous emission and nocturnal emission can be treated by astringent, but it is applied after dredging method; it is good formula that "*yi xue gang mu*" uses *wu bei zi* 50g, *fu ling* 100g to treat deficient spontaneous emission, more reducing than astringing. It can be referred. Additionally, *wu bei zi* powder is mixed with saliva, used to cover navel and then covered by gauze. As for hyperactivity of minister-fire, *zhi bai di huang wan* added with *shui lu er xian dan* is used to nourish *yin* and descend fire to astringe essence.

[case] patient *Ouyang*, male, 25, worker. He once had masturbation. Then he had frequent spontaneous emission and nocturnal emission once every two to three days. The coating was thin, and the pulse was thin. It was due to kidney deficiency and uncontrol of essence gate. The pills of mentioned in "*yi xue gang mu*" was prescribed.

Wu bei zi 30g and *fu ling* 60g were grinded into powder and made into pills as large as phoenix tree seeds. 50 pills were taken every time, twice a day. The emission was stopped by 5 days, and cured after half month.

3) Longy cough due to lung deficiency: longy cough due to lung deficiency should be treated by supplementing and reducing at the same time. *wu bei zi* and *wu wei zi* are used. Doctor *Zhu Danxi* says, *wu bei zi* belongs to metal and water, and it is good at treating obstinate phlegm and is a good drug for resolving heat toxin assisting other drugs; cough in the dusk is caused by fire floating into lung. It can be treated by cool drugs, should be treated by *wu bei zi* and *wu wei zi*. It is symptom of chronic bronchitis, so *wu bei zi* is not suitable for acute cough.

[case] patient *Yang*, female, 62, worker. She had frequent reoccurrence of chronic bronchitis, frequent cough, little phlegm, little coating, pale tongue, thin and scatter pulse. It was due to failure of *qi* to be descended. The treatment method was astringing lung and relieving cough.

Wu bei zi 150g, *wu wei zi* 150g and *hu tao rou* 150g are grinded into powder and made into pills as large as mung bean with honey, 6g both in the morning and evening. Cough was relieved a little after 5 days, and cured after

10 days. The pills were still effective to reoccurrence.

4) Chronic diarrhea and dysentery: the beginning of diarrhea and dysentery belongs to excess and heat, and should be treated by clearing and dredging. Chronic diarrhea and dysentery should be treated by stopping and astringing. *Wu bei zi* not only can astringe, but also can inhibit bacterium, so it is suitable for chronic diarrhea and dysentery. "*ben cao gang mu*" lists 6 formula which contain *wu bei zi* to treat diarrhea and dysentery, among which the compatibility of *pi xie jiu li fang* is good and the clinical effect is good. It is effective to non-specific colitis.

[case] patient *Hu*, male, 48, cadre. He had dysentery, which can be reduced by disordered diet and coldness. The manifestations were abdominal pain, intestine sound, diarrhea four to five times a day, accompanied with mucous, thin and white coating, and thin and weak pulse. It was longy dysentery due to spleen deficiency. *Pi xie jiu li fang* was prescribed.

Wu bei zi (baked) 60g, *cang mi* 90 (baked), *bai ding xiang* 9g, *xi xin* 9g, *mu xiang* 9g, *hua jiao* 12g. They were grinded into powder, 3g every time with honey water, twice a day. The symptoms were relieved a little after 3 days, and nearly cured after another 5 days. Later he was asked to take *xiang sha liu jun zi wan*.

5) All kinds of bleeding: *wu bei zi* contains large amount of tennin and can accelerate blood coagulate so as to stop bleeding. It is suitable for both oral administration and external use. It can be used for nose bleeding, gum bleeding, hemoptysis, hematemesis, uterus bleeding, bloody stool and hematuria which have no excessive fire. *Wu bei zi* alone or added with half dose of *ku fan* is grinded into powder and made into pills as large as phoenix tree seed with rice flour. 10 to 20 pills are taken with rice soup after meal every time, twice to three times a day. The powder can be used to cover the focus for nose bleeding and gum bleeding.

[case] patient *Xie*, male, 38, worker. He had frequent bloody stool. It was *chang feng xia xue*. *Wu bei zi* 15g and *bai fan* 15g are grinded into powder and made into pill as large as phoenix tree seed with water. 12 pills are taken after meal, twice a day. The blood stool was relieved gradually by drugs, and stopped after 4 days. It reoccurred after half year, and also was cured the pills.

6) Enuresis: it is due to kidney *qi* deficiency and uncontrol of bladder. *wu bei zi* assisted with the same dose of *sang piao xiao* is grinded into powder, 4g every time, twice a day. They can supplement kidney, astringe bladder and control urine.

[case] patient *Guo*, female, 12. She had weak constitution, pale complexion, fatigue, weak waist and legs, frequent enuresis, white coating, pale tongue, thin and weak pulse. It was due to kidney *qi* deficiency and uncontrol of bladder. The treatment methods were nourishing kidney, strengthening root, astringing bladder and controlling urine. *Wu bei zi* and *sang piao xiao* with same dose were grinded into powder, 4g every time, twice a day. The drugs

took effect after 5 days. The disease was cured after half month.

7) Prolapse of anus and uterus: they are caused by *qi* deficiency and descendant of middle *qi*. The treatment methods are supplementing and lifting *qi* to treat root, and astringing and controlling prolapse to treat branch.

[case] patient *Wan*, female, 35, farmer. Due to weak constitution, unrecovery of *qi* and blood after dystocia and over-work after mother died, she suffered prolapse of uterus. Gynecological tests showed prolapse of uterus II degree. The coating was thin, tongue was pale, and the pulse was thin and weak. It was due to descendant of clear *qi*, and the treatment methods were supplementing and lifting *qi* and astringing and controlling prolapse.

I\ external use: *wu bei zi* 20g were grinded into powder and decocted. It was put into tub to fumigate and wash to focus, twice a day.

II\ oral administration: *bu zhong yi qi wan* 250g, 9g in the morning and evening.

The disease was improved after one week, and cured after another 10 days.

8) Cervical erosion: the main symptom is much and fishy leucorrhea. Powder of *wu bei zi* and *ku fan* with the same dose is dipped by sterilized gauze and then put into vagina until uterus, once a day. It can diminish inflammation, stop leucorrhea and promote granulation.

[case] patient *Qi*, female, 39, worker. She suffered chronic cervical erosion for more than 2 years. In the recent months, she had much and fishy leucorrhea with yellow color, lowder abdominal pain, thin and yellow coating, slight wiry pulse. Gynecological tests showed cervical erosion II degree. It was due to weak body and heat-dampness going town. *Bei ku san* was prescribed for external use. The leucorrhea was reduced a lot after 3 days, and stopped after another 1 week, and abdominal pain was also stopped. Gynecological tests showed cervical erosion was going to heal up.

9) Stomatitis and gingivitis: they are usually caused by stomach fire going up. Besides drugs for clearing stomach and descending fire for oral administration, powder of *wu bei zi* and *qing dai* with the same dose can be applied for external use to diminish inflammation, eliminate swelling, and stop pain. They can accelerate the heal-up.

[case] patient *Yan*, male, 42, worker. Due to longy over-work resulting in fire going up, he had frequent stomatitis, accompanied with swelling gum, slight yellow coating, red tongue and thin and rapid pulse. *Bei dai san* was prescribed for external use, and *jue ming zi* 10 and *zhi mu* 10 were drunk as tea. It was improved after 3 days and cured after 5 days.

10) Ulcer: *wu bei zi* is good at resolving toxin and treating ulcer, and can kill many kinds of bacteria. It can be considered as herbal broad spectrum antibiotics. So it is used to treat all kinds of swelling, scrotum eczema, and ulceration diseases such as ringworm and favus. "*ben cao gang mu*" lists and quotes many effective formula. We are going to quote some to refer.

1\ all kinds of ulcer ("*pu ji fang*"): *wu bei zi* and *huang bai* with the same dose are grinded into powder and used to cover the focuses.

2\ all kinds of swelling (“*jian bian fang*”): *wu bei zi* is stir-baked into dark purple color, mixed with honey, and used to cover the focuses.

3\ scrotum eczema (“*tai ping sheng hui fang*”): *wu bei zi* 15g, *la cha* 15g and proper dose of *qing fen* are grinded into powder. After scrotum being washed by *cong jiao tang*, the powder is mixed with sesame oil and used to cover the focus until it is cured.

4\ all kinds of ringworm (“*jian bian fang*”): *wu bei zi* (without insects) and *bai fan* (baked) with same dose are grinded into powder to cover the focuses. If the focus is dry, the powder is mixed with oil.

5\ damp and ulceration of leprosy (“*pu ji fang*”): *wu bei zi* powder is mixed with saliva and used to cover the focus.

6\ uncoalesce of ulcer: baked *wu bei zi* is grinded into powder, mixed with vinegar and used to cover the round of ulcer.

11) Ciliary blepharitis: *wu bei zi* has stringent action and can diminish inflammation and kill bacteria. It is effective to all kinds of eye diseases. Three formula recorded into “*ben cao gang mu*” are quoted for reference.

1\ toxic wind attaching eyes (“*bo ji fang*”): unbearable itch and pain of eyes, marginal blepharitis, and nebula and blood stasis invading sclera can be treated by *shen xiao qu feng san*. *Wu bei zi* 30g and *man jing zi* 45g are grinded into powder, 6g every day. Another 6g powder is decocted. After filtered, it is used to wash eyes when it is warm. The residue can be decocted again.

2\ ciliary blepharitis (“*ji ling fang*”): *wu bei zi* is calcined and grinded into powder, mixed with small dose of *fei huang dan*, and used to cover the focus, three times a day. It is quite effective.

3\ marginal blepharitis and pterygium (“*ji ji fang*”): *wu bei zi*, *tong qing* and *bai shan tu* are grinded into powder. The powder is mixed with hot water and used to wash the eyes after the eyes are closed. The cool drugs should be warmed again before another washing. The eyelid can not be put into the liquid.

Subsidiary Drugs: *Bai Yao Jian*

Bai yao jian is fermented from *wu bei zi* and tea or *wu mei*, *bai fan* or *ju geng* and *gan cao*. The color is gray brown and has fragrance. It is acid and sweet in flavor, mild in nature, nontoxic and attributive to heart, lung and stomach meridians.

Doctor *Li Shizhen* says, the functions of *bai yao jian* is similar to *wu bei zi*, but the body is light, the nature is floating and the flavor is sweet; it can treat heart and lung, cough, phlegm, heat and thirsty diseases; it is most suitable for keeping in mouth. The functions are (1) clearing lung, eliminating phlegm; (2) stopping thirsty, nourishing fluid, clearing summer heat, resolving heat; (3) activating stomach, resolving alcoholism, stopping bleeding, treating dysentery; (4) relieving pain, treat malnutrition, eliminating dampness and treat ulcer.

Bai yao jian is good at clearing and astringing, so it is not suitable for acute

cough and heat-dampness and food stagnation. The dose is 4 to 8g for oral administration. It can be made into soup for gargle or keeping in mouth, and also can be used as pills, powder or external use. The clinical applications are:

1) Chronic bronchitis: the disease has heat and cold types. *Ding sou jie yan* (*bai yao jian*, *he li le* and *jing jie sui* with the same dose are grinded into powder, made into pills as large as *qian shi* with ginger juice and honey. It is used for keeping in mouth.) of “*dan xi xin fa*” is suitable for cold and deficiency type. *Ding sou huan tan fang* (*bai yao jian*, *pian huang qin*, *ju hong* and *gan cao* with the same dose are grinded into powder, made into pills as large as mung bean. They are used to be swallowed.) of “*pin hu yi an*” is suitable for heat type. They can be selected according to syndrome differentiation.

2) Throat pain: *bai yao jian san* (*bai yao jian* 15g, *peng sha* 5g, *gao cao* 6g. 3g of powder is mixed with rice soup and swallowed slowed after meal.) of “*yi xue xin wu*” is effective to acute and chronic pharyngitis.

3) Thirst of summer-heat: *shui piao wan* of “*sui shi guang ji*” uses the same dose of *bai yao jian* and *la cha*. They are grinded into powder and made into pills as large as *qian shi* with pounded *wu mei*. One pill is kept in mouth every time. It can eliminate summer-heat and stop thirst for thirst of summer-heat. It also can be used to prevent summer-heat and relieve thirst for the people working in hot place in summer.

Additionally, it also can be used for *chang feng xia xue*, prolapse of anus of dysentery, pain mass in breast, intestine absence, ulcer in lower legs.

28 Zi Cao Rong

Zi cao rong is pectin secreted by female Lacciger *Lacca* Kerr. Its other names are *chi jiao*, *zi kuang*, *zi geng*, *zi jiao* and *chong jiao*. The insect body is extreme small, the male insect has long spindle-shaped body, the life is very short, and they mostly completes the emergence the copulation and the fertilization in one day. Larva is hatched in every year's spring and autumn. After the being hatched, they crawl to the tree, gather on the layer and absorption juice. One week later, they start to secret colloid, covering the body and connecting them together. After 1 to 1.5 months, they stop secreting colloid and begin to oviposit. The colloid was dark red, hard and can be softened by warm, and stick. It can be used as bone of glass. It is produced in Guangxi, Guangdong, Yunnan, Zhejiang, Fujian, Hunan and Xizhang provinces. It is bitter in flavor, cold in nature, nontoxic and attributive to heart meridian.

It is first recorded by “*xin xiu ben cao*”. It is considered to treat factors in five-*zang* organs, weapon wound, leucorrhea, blood stasis and promote granulation and relieve pain. It has functions of activating blood, cooling blood, treating ulcer and relieving pain. In “*hai yao ben cao*”, doctor *Wang Xun* uses it for external used, to treat dampness and itch of ulcer and scabies. It has functions of expelling wind and eliminating dampness. It begins to be

used to promote rash and pox in *Qing* Dynasty. In “*ben jing feng yuan*”, doctor *Zhang Lu* points out that *zi kuang* just is *zi cao rong*; the ancient formulas use it to treat five-*zang* organs, weapon wound, uterus bleeding, blood stasis and promote granulation and relieve pain; now it is used to treat pox better than *zi cao*; it is called *zi cao rong*, but does not belong to *zi cao*. “*dou xue zhen chuan*” discusses it in detail, *zi cao rong* can promote pox; 4 to 5 *fen* of *zi cao rong* can be added into the drugs for clearing and resolving is always effective to blood heat obstruction, restlessness due to bleeding, sunken top, swelling ulcer and furuncle. “*shen ying xin shu*” mentions that 1 *qian* of *zi cao rong* is pounded and taken with wine for expediting child delivery. The functions are complete until then. But contemporary doctors use it only for stagnation of pox, little for other symptoms. It is pity. The functions are (1) promoting pox and rash, (2) resolving toxin, eliminating carbuncle, (3) dispersing stasis, stopping uterus bleeding, (4) expelling wind and eliminating dampness, (5) expediting child delivery and induced abortion.

Zhejiang province medical academe ① uses *zi jiao* 2g added with 100ml of 90% alcohol is warmed for half hour to be dissolved. It is used to cover the feet and hand twice a day to prevent hookworm.

It is reported by “New Pharmacognosy” (page 357, 1963) that *zi cao rong* contains 74.5% of colloid, a macromolecular compound which is composed of shellac acid, aleuritic acid, etc..

The dose of one day is 3 to 5g for decoction, and 1 to 2g for powder. They are taken by two times. The effect is good. Proper dose is applied for external use. The patients with spleen and stomach deficiency and pregnant women are contraindications. The clinical applications are:

1) Pox and rash without adequate eruption: *zi cao rong* can promote eruption of pox and rash, so it is suitable for pox and rash without adequate eruption due to heat toxin obstructing *ying* phase. It is not suitable for deficiency type of sunken pox and rash.

[case] patient *Xie*, female, 4. She suffered fever for 4 days, red eyes with tears, restlessness, thin measles without adequate eruption, thin and yellow coating, red tongue, rapid pulse, and dark purple finger vessel. It was due to obstruction of heat blood. The treatment methods were cooling blood, promoting eruption of measles, clearing heat and resolving toxin.

Zi cao rong 5g, *zhi jiang can* 5g, decoction, 2 doses. After taking drugs, measles began to erupt, and the fever and restlessness were abated a little. After taking another two doses, measles erupted completely and the fever was abated.

2) Furuncle, ulcer, toxic swelling: *zi cao rong* can clear heat, resolve toxin, eliminate carbuncle and swelling, promote granulation, and relieve pain, so it can be selected for furuncle, ulcer, carbuncle and swelling due to toxic heat obstruction,

[case] patient *Lu*, male, 35, farmer. He suffered pain, swelling and redness of left arm, aversion to cold and fever for 4 days. It was not cured by himself.

The coating was thin and yellow, the tongue was red, and the pulse was rapid. It was due to heat-dampness in meridians and obstruction of *ying* and blood. The treatment methods were clearing heat, eliminating dampness, dispersing stasis, resolving toxin, and eliminating carbuncle. *Chi shao* 12g, *zhi jiang can* 12g, *lian qiao* 12g, *tian hua fen* 12g, *zi cao rong* 2g. They are grinded into powder and taken by two times. *Yin hua teng* 20g, *she she cao* 20g, *gao cao* 5g, 3 doses.

After taking drugs, the pain was relieved a lot, and the aversion to cold and fever was abated. He was cured by another two doses.

3) Uterus bleeding due to blood stasis: the treatment for uterus bleeding usually is stopping bleeding, strengthening root. But the reasons can not be ignored. If it is due to blood stasis, *qi* stagnation, manifesting as abdominal pain which aggravated by pressure, dark and purple tongue, petechia in the edge of tongue, deep and rough pulse, it should be treated by dispersing stasis and stopping bleeding. *Zi cao rong* is quite suitable. *Zi kuang san* (*zi kuang* is grinded into powder, 6g every time. it is taken with water before meal, twice or three times a day.) of “*yang shi jia cang fang*” is a good example.

[case] patient *Shen*, female, 34, farmer. She had unsmooth menstruation with dark purple gore for more than 10 days. The manifestations were abdominal pain which aggravated by pressure, purple tongue, petechia in the edge of tongue, deep and rough pulse. It was uterus bleeding due to blood stasis. The treatment was dispersing stasis and stopping blood. 30g of *zi cao rong* was grinded into powder, 6g both in the morning and evening. It was taken with water. Uterus bleeding and abdominal pain was stopped by taking drugs for two days.

3) Expelling wind and eliminating dampness: *zi cao rong* can expel wind and eliminate dampness, so it can be applied for external use for eczema and scabies with itch and effusion.

[case] patient *Jiang*, male, 41, worker. There were much itch rashes in the limbs, then blister. They effused liquid after broken. He was treated for many times without being cured. The coating was thin and yellow, the tongue was red, and the pulse was slight rapid. It was due to heat dampness in *ying* phase which flooding into skin. The treatment methods were expelling wind, eliminating dampness, cooling blood and activating blood. *Zi cao rong* 100g were grinded into powder for external use, three times a day. The itch was stopped and focus began to heal up after using drug. He was cured after 4 days.

1\ Zhejiang province medical academe: experiment of *zi jiao* preventing hookworm from invading into skin and effect compare to *bing wei tuo*, Zhejiang Medicine Journal 1962,3 (2):69

29 chong bai la

Chong bai la is white waxiness on branches of ash trees or glossy privets which is secreted by male body of *Ericerus pela* Chavannes. It is also called

chong la, bai la, chuan la and mu la.

The body of female is round and small without wings, and the body of male is long with wings. The male insect has orifices for secreting waxiness. The male larva begins to secrete waxiness and the waxiness would cover the whole body. After the second ecdysis, the larva becomes pupa which would become imago after two weeks. The male insect would die right away after mating with female insect. *Chong la* usually is collected in autumn. It is put in boiling water and then filtered. After solidifying, it can be used as drug. It is produced in Jiangxi, Zhejiang, Fujian, Hubei, Hunan, Guangxi, Guangdong, Sichuan, Yunnan provinces. It is warm in nature, sweet in flavor, nontoxic and attributive to heart and spleen meridians.

This drug begins to be known in Yuan Dynasty, and is used widely in Ming Dynasty. Doctor *Zhu Danxi* considers that it can promote granulation, stop bleeding, relieve pain, supplement deficiency, reunion bone and tendon. He also emphasizes that it absorbs astringing *qi*, and is an important drug for surgery; it is effective if it is put into *zhang ji rou gao* with *he huan pi*. Doctor *Li Shizhen* says, it can be used as pills and powder, and can kill tuberculosis. Because it can supplement lung and astringe *qi*, "*dong yi bao jian*" considers that it can stop cough and diarrhea, moisten lung and thicken intestine and stomach.

The medical functions are (1) stopping all kinds of bleeding; (2) supplementing lung and stopping cough; (3) thickening intestine and stopping diarrhea; (4) promoting granulation and astringing ulcer; (5) treating trauma and relieving pain.

Chong bai la is a mixture of ester which is 93% to 95%, and also free myricyl alcohol ①, etc..

It can be used both for external use and oral administration. It is usually made into pills or powder for oral administration. The dose for one day is 3g to 5g, proper for external use. Because of astringing nature, it is not suitable for ulcer without ulceration, ulcerated ulcer with thin pus and acute external syndrome. The clinical applications are:

1) Stopping all kinds of bleeding: such as hematemesis, hematuria, bleeding of trauma. It can be used for oral administration or external use to stop bleeding. It can be grinded into powder, used to cover the focus and then bound up by sterilized gauze for bleeding of trauma. The bleeding and pain would be stopped quickly. It is a good standing drug for family. It can be grinded into powder, put into capsules for hematemesis, hematuria and bloody stool, 2g every time, twice to three times a day. It is quite effective. It is suitable for bleeding of peptic ulcer, because it not only can stop bleeding, and also can promote the heal-up of ulcer and stop pain. It is a good drug with multiple functions.

[case] patient *Fang*, male, 45, worker. She suffered recurrence of bloody stool with abdominal pain, purple blood and mucus in stool. He once received colonoscopy and found that five ulcers 12 to 17cm above anus and

congested mucous membrane. The diagnosis was ulcerative colonitis. The coating was thin, the tongue was pale, and the pulse was thin. It was due to longy middle-*qi* deficiency, failure of spleen to dominate blood, and failure of *qi* to control blood. The treatment methods were supplementing deficiency strengthening middle-*jiao*, stopping bleed.

Chong bai la 120 was grinded into powder and put into capsules, 6 capsules every time, three times a day before meal. The bloody stool began to be reduced after taking drug and the pain was also relieved. Continuous administration was applied to enhance the therapeutic effect. Colonoscopy after one month revealed that the ulcer was going to heal up. He was nearly cured.

2) Longy cough of chronic bronchitis: *chong bai la* can moisten lung, supplement lung, astringing *qi* and stopping cough, so it can be used for longy cough with little sputum or even blood of chronic bronchitis. Although it is warm in nature, it is not dryness, so it also can be used for lung *yin* deficiency.

[case] patient *Yue*, male, 64, farmer. She suffered chronic bronchitis which was severe in autumn and winter, cough with little sputum or blood sometimes, chest pain, short breath, dry mouth, red tongue with little coating, slight wiry pulse. It was due to deficiency of *qi* and *yin*, and failure of *qi* to descend. The treatment methods were moistening lung, astringing lung and stopping cough.

Chong bai la 150g was grinded into powder and put into capsules, 6 capsules every time, three times a day. The cough was relieved a lot, the chest pain and dry mouth were stopped, and the patient felt good after one week. The patient was clinically cured by continuous administration.

3) Bloody dysentery: it is often seen in amoebic dysentery or chronic ulcerative colonitis. The manifestations are frequent reoccurrence of bloody stool with pus and slight abdominal pain. *Chong bai la* can thicken intestine and stomach, and also can stop bleeding and relieve pain. So it is quite suitable for bloody dysentery.

[case] patient *Chang*, female, 37, worker. She suffered cold type of dysentery which could be induced by coldness and disordered diet. The manifestations were abdominal pain, stool with blood and pus, pale complexion, fatigue, thin coating, pale tongue, and thin and weak pulse. It was due to weak spleen and stomach, warm-dampness injuring intestine. The treatment methods were warming middle-*jiao*, supplementing deficiency, thickening intestine and stopping bleed.

Chong bai la 150g was grinded into powder and put into capsules, 6 capsules every time, three times a day. After taking drugs for 5 days, the bloody stool began to be relieved and the abdominal pain was stopped. The disease did not reoccur by continuous administration.

4) Unheal-up of longy ulcerated ulcer: ulcer which has ulcerated and does not heal up for long time usually is due to failure of deficient *qi* and blood to astringe ulcer, resulting in pus, sunken focus with dark color. *Chong bai la* can

supplement deficiency, and promote granulation. It is effective. So, doctor *Zhu Danxi* considers it as an important drug for surgery.

[case] patient *Huo*, male, 57, farmer. He suffered diffuse swelling in the internal side of left leg. It ulcerated with thin pus after two months. It had not healed up until then. Other manifestations were pale complexion, fatigue, poor appetite, thin coating, pale tongue, and thin and weak pulse. It was *yin* furuncle. The treatment methods were supplementing deficiency, astringing tissue, and promoting granulation.

Chong bai la 120g (melted), *he huan pi* 30g, *er cha* 30g were grinded into powder and made into adhesive plaster for external use, once a day. The pus reduced and granulation tissue became red after using drugs for 6 days. He was cured after using drugs for another two weeks.

5) Trauma: local swelling and pain due to trauma can be treated by *chong bai la* for external use. It can eliminate swelling, relieve pain and reunion bone and tendon.

[case] patient *Yin*, female, 11, student. She suffered falls and swelling and pain of right knee. X ray showed no bone fracture. *Chong bai la* was melted and put on gauze to cover the focus, once two days. The swelling and pain were relieved by three times.

Comment: *wu bei zi*, *zi cao rong* and *chong bai la* are secretion of insect. Their nature and functions are different. *Wu bei zi* has astringing function, and can stop cough, diarrhea and bleeding, and also can nourishing fluid to stop thirst. *Zi cao rong* is good at activating blood, cooling blood, promoting eruption of rash and pox, and also can resolve toxin and eliminate carbuncle. *Chong bai la* usually is applied for external use, but also suitable for oral administration. It is good at promoting granulation, stopping bleeding, pain, cough and diarrhea. They have own advantages, and should be selected correctly.

1\ Chemistry Dictionary (II) 5: page 938

30 ying huo chong

Ying huo chong is dried body of *Luciola vitticollis* Kies.. They have thin and long body, dark brown or yellow brown color, 6 feet, antenna and wings. Electric lamp in tail part contains fluorescein adenosine triphosphate and luciferase. When luciferase activates fluorescein adenosine triphosphate, blue fluorescence comes up. It is reported that ATP exists in the all bodies of organism. If it runs into luciferase, they would have reaction. In the recent days, scientists are trying to use technique of luciferase testing ATP to test cancer. After the luciferase combines with cancer cells, the growth speed and activity of cancer cells can be known according to light intensity. Thus, proliferation of cancer can be diagnosed correctly, affording basis for treatment ①. If they succeeded, it was a new contribution of *ying huo chong* to human healthy. They hind in grass in the daytime, and fly out in the evening. They are common seen summer and autumn. The other names of *ying huo chong* is *ye guang*, *ye zhao*, *fang guang* and *zhao lin*. It is pungent in flavor,

slight warm in nature, nontoxic and attributive to lung and liver meridians.

“*ben jing*” says, it can promote eyesight, treat infantile burn and scald and heat *qi*. “*zhen quan ben cao*” and “*yao xing fu*” point out that it is an important drug for *qing mang* (optic atrophy). “*bian min tu zhuan fang*” uses it to wipe hair to make it black for white. The comments of “*shen xian gan ying bian*” are wrong. The medical functions are (1) supplementing liver, promoting eyesight to treat *qing mang*; (2) clearing fire, resolving toxin to treat infantile burn and scald; (3) making hair black. The author has not tested the function of making hair black by external use.

The dose for one is 7 to 14 for oral administration, proper for external use. The clinical applications are ;

1) *Qing mang*: it is due to deficiency of liver and kidney, consumption of essence and blood resulting in eye atrophy. “*zhu bing yuan hou lun*” says, *qing mang* is the eye can not see things but with normal appearance and pupil. It is similar to optic atrophy. *Ying huo chong* is good at treating *qing mang*. The experiments confirm that the substances for lighting are help for optic nerve. Therefore, the achievement of ancient doctors by experience is admirable. The treatment methods are nourishing liver and kidney, supplementing essence and marrow, opening orifice and promoting eyesight. If *ying huo chong* is added, the therapeutic effect would be better. *Lao shang qan qi mu an fang* of “*sheng hui fang*” uses the formula to treat *qing mang* that 27 *ying huo chong* are put in gallbladder of big cyprinoid, dried in the shade for one hundred days, grinded into powder and put into eyes with little dose. It can be referred. *Lin Shiye*, a doctor of Xuzhou mining bureau staff hospital, once used *ying huo chong* assisted by syndrome differentiation to treat a case of optic atrophy effectively. Thanks every much for affording the case.

[case] patient *Qin*, female, 30, worker. She suffered blurry left eye with poor eyesight, dizziness and eye distention since 1976. She loss eyesight form March, 1969. She was treated for many times but without being cured. Ophthalmologic examination showed negative eyesight of left eye. She was diagnosed as optic atrophy. After taking 50 doses of formula (*sheng di, yuan shen, nv zhen, yun mu, xia ku cao, qi zi, ju hua, shan hu, sang shen zi*) for supplementing liver and kidney, dizziness and eye distention were relieved a lot. Later, drugs for activating blood and dispersing stasis (*dang gui, chong wei zi, qi cao, yang gan* were added.) were added into the formula. After taking another 20 doses, the symptoms were improved, but not satisfied. It was summer then. Considering that *ying huo chong* can promote eyesight and treat *qing mang*, *ying huo chong* 14 added into the formula. After taking 10 doses, the eyesight was promoted. The eyesight recovered to 0.7 after taking drugs until 16th, September. Two months later, she sent a letter and said, the eyesight was better, thanks.

Comment: seen form this case, the effect is better after *ying huo chong* is added. It confirms the effect of *ying huo chong* on optic atrophy.

2) Infantile burn and scald: *ying huo chong* can clear heat and resolve toxin,

so it is suitable for infantile burn. With the help of *sheng di*, *chi shao*, *dan pi*, *yin qiao*, *zao xiu*, *da huang*, the effect is better.

[case] patient *Wei*, male, 5. He suffered scald of chest, abdomen and lower limbs with blister, ulceration, effusion and extreme pain. It was I to II degree. Besides *di yu*, *da huang* and sesame oil^②, formula for cooling *ying*, clearing heat, reducing fire and resolving toxin was taken. *Ying huo chong* 7, *sheng di* 8g, *chi shao* 8g, *yin qiao* 8g, *zao xiu* 8g, *dan pi* 6g, *huang lian* 2g, *gan cao* 2g, 2 doses. After taking drugs, the pain was relieved a lot and effusion was reduced. After taking another 3 doses, the wound began to form incrustation. He was cured after 2 weeks.

1\ science star—*ying huo chong*, 6:8, 1981, “Science and Life”, Liaoning people’s republishing house.

2\ *di yu* and *da huang* are grinded into powder with the same dose. 30g of powder is mixed the 70ml of sesame oil and made into plaster. It is used to cover the focus, once to twice a day.

31 *bi qian* (subsidiary drugs: *bi qian mu*)

Bi qian is the body of *Vroctea Limbata* L. Koch. Its ovary is called *bi qian mu*. It also can be used as drug. The shape of *bi qian* is similar to *zhi zhu*. It has plate body, grey brown color, intensive small eyes and 12 feet. Weave organ in tail part can reel silk to make cocoons. Its other names are *bi jing*, *bi xi* and *bian zhu*. It is common seen in old house. It can be collected all year around. It is slight cold in nature, salty in flavor, non toxic and attributive to lung and large intestine.

The earliest record of *bi qian* is “*ben cao shi yi*”. Doctor *Chen Cangqi* says, the juice of *bi qian* can be put into nose or ulcer for nosing bleeding and bleed due to weapon injury; it also can be used for hemorrhoid bleeding. It is used mainly for stopping bleeding. “*ben cao gang mu*” develops its functions and says, *bi qian* and *ren zhong bai* with the same dose are burnt and grinded into powder for acute ulcerative gingivitis by external use, and it also can treat throat obstruction. It is an important drug for throat obstruction and can resolve toxin and gingivitis. Doctor *Li Shizhen* says, the formula for throat obstruction and tonsillitis in “*ben cao gang mu*” can make dead people revive, showing its good effect. Therefore, the functions are (1) stopping all kinds of bleeding; (2) eliminating throat swelling, treating throat obstruction; (3) resolving toxin and treating gingivitis. It is a pity that the application of *bi qian* is ignored, and only *bi qian mu* is used in nowadays.

It is usually used for external use. The juice is squeezed for stopping bleeding. It is burnt and grinded into powder to cover the focus for throat obstruction and gingivitis.

1) All kinds of bleeding: such as nosing bleeding, bleeding due to weapon injury and hemorrhoid bleeding. The juice is squeezed to cover the focus. It has astringing action and can stop bleeding quickly.

[case] patient *Xia*, male, 45, farmer. His leg was hacked by hoe when he was working in the farm. It bled a lot. He was asked to find *bi qian* and

squeeze the juice to wipe the focus. The bleeding was stopped quickly.

2) Throat obstruction and tonsillitis: *bi qian* can resolve toxin, eliminate swelling and relieve pain, so it is effective to swelling, pain and ulceration of throat obstruction and tonsillitis. The formula for throat obstruction and tonsillitis in “*ben cao gang mu*” is: *bi qian* 7 and *zhi zhu* 2 are dissolved by *bai fan* 7fen, then burnt and grinded into powder; the powder is used to cover the focus; the effect is quickly; heat meat and hard food are not allowed to eat. It can be used for thanatosis due to asphyxia of throat swelling. When the author was do mobile medical work in country, he asked the healthy center to prepare it. It is effective for throat swelling and ulceration. It is used three to four times by laryngeal insufflation. Usually it is cured after one to three days.

[case] patient *Hun*, male, 12. He suffered tonsillitis for 3 days. The manifestations were dysphagia and dyspnea. The method of “*ben cao gang mu*” was used, four times a day. After using the drug, there were much saliva and the throat swelling was abated gradually. He was cured after two days.

3) Ulcerative gingivitis: *bi qian* and *ren zhong bai* is burnt, grinded into powder and used to cover the focus. It is effective. Because it can resolve toxin, relive pain, draw stale and astringe ulcer.

[case] patient *Shuai*, female, 5. She suffered measles. After she was cured, he suffered ulcerative gingivitis. The color changed into black for white, and black and fishy effusion came up. The method of “*ben cao gang mu*” was used, and mung bean soup was used for oral administration.

Bi qian 10g and *ren zhong bai*10g were burnt and grinded into powder with small dose of *bing pian*. The powder was used to cover the focus, four to five times a day.

After using the drug, the pain was relieved. The ulcerative gingivitis was controlled next day. She was cured after one week.

Subsidiary Drugs: *Bi Qian Mu*

Bi qian mu is ovary of *bi qian*. Its other names are *bi nang*, *bi qian ke* and *xi er ke*. It is white, thin, soft and round. It is mild in nature, salty and bitter in flavor, nontoxic and attributive to lung and stomach meridians.

The medical functions are (1) eliminating swelling, soothing throat; (2) descending adverse flow of *qi*, stopping vomiting; (3) astringing lung, stopping cough; (4) promoting granulation, stopping bleeding; (5) killing parasite and relieve toothache.

From Ming and Qing Dynasty, it is often used for many kinds of diseases of tongue and throat, such as erosive throat, throat obstruction, tonsillitis, mouth ulcer, tongue ulcer, etc. *xi lei san* of doctor *You Zaijing*'s “*jin kui yi*” is a good example. “*yi lun zhuan yao*” uses it to treat knife injury and bit, stop bleeding, promote granulation and relieve pain. It is also often used in nowadays.

Besides some formula for oral administration, it is usually used for external use. The clinical applications are:

1) erosive throat, throat obstruction, tonsillitis: *xi lei san* of “*jin kui yi*” is composed of *bi qian mu* 200 (baked), *xi niu huang* 5fen, *bing pian* 3 fen, *zhen*

zhu 3qian, ren zhi jia 5fen, xiang ya xie (baked) 3qian, qing dai 6qian. They are grinded into powder. It can clearing heat, resolve toxin, eliminate swelling, relieve pain draw stale and promote granulation. In the recent years, because of its effect of treating ulcer, it is used for ulcerative colitis that 1 to 2 bottles of *xi lei san* mixed with 20 to 40ml of physiological saline for retention enema. It is quite effective.

[case] patient *Wang*, male, 26, worker. He suffered fever for three days with throat swelling and pain. There was ulcer in left side. The fever was abated, but the throat was still pain then. The coating was yellow, tongue was red, and the pulse was rapid. It was due to heat toxin in lung and stomach attacking throat. The treatment methods were clearing heat, expelling wind, reducing fire, and resolving toxin. Oral administration and external use were used together.

1. *niu huang jie pian* 2 bottles, 6 tablets every time, three times a day.
2. *xi lei san* 2 bottles. Small dose of *xi lei san* was used for laryngeal insufflation, once every two hours.

After using the drugs, the patient had a smooth defecation, pain was reduced a lot and the rot was better. He was cured after using *xi lei san* only for another two days.

Comment: *bi qian mu 3* (calcined) and *bai fan 1g* are grinded into powder, taken by two times with water. It is effective to throat obstruction and tonsillitis. *Bi qian mu 3 to 5* (calcined) and *bian pian 0.07* are grinded into powder for laryngeal insufflation, four to five times a day. It can be used for diphtheria. They can be referred.

2) Bleeding of trauma: *bi qian mu* can protect membrane and stop bleeding, so it can be used to cover the focus for bleeding of trauma and ulcer without healing up of long time.

[case] patient *Hua*, female, 44, farmer. Back of hand was hurt by hook with much bleeding. *Bi nang* was used to cover the focus. The bleeding was stopped quickly.

Doctor *Chen Cangqi* uses decoction of *bi qian mu 27* for infantile vomiting and belch. Doctor *Li Shizhen* uses decoction of *bi qian mu 35* for severe cough after child birth. "*pu ji fang*" put *ru xiang* into *bi qian mu*, calcined them and put them into focus of toothache to stop pain. The functions of stopping vomiting, cough and pain can be confirmed. It is worthy trying,

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Both *ying huo chong* and *bi qian* can resolve toxin and treat ulcer. *Ying huo chong* is good at supplementing liver, promoting eyesight, and treating *qing mang*. *Bi qian* is good at treating throat obstruction, and all kinds of bleeding. These are differences and their own advantages.

32 fei lian

Fei lian is dried body of *Blatta Orientalis* Linneaus. It is long ellipse, dark brown and luster. The body is plate, the head is small, and trophy is powerful. Two antennas are thin and long. Two compound eyes are kidney-like. 6 feet

have pricks. The abdomen has 10 sections, among which the 6th and 7th sections have gland orifices which can secrete oil-like fishy liquid. It has wings and can fly. The walking speed is quick. They live in warm and dampness places, especially kitchen and cupboard. They hide in the daytime, and go out in the evening. They like rice and soup. They usually vomit out part food and discharge stool one it. It is odorous and transmits bacterium. They are injurious insects. Its other names are *zhang lang*, *hua chong*, *cha bo chong* and *zao ma*. The *fei lian* produced in north china is big and named America cockroach. The small *fei lian* produced in other provinces is called East cockroach. It is salty in flavor, cold in nature, and attributive to liver and spleen meridians.

“*ben jing*” says, it can disperse stasis, soften hardness, treat aversion to cold and fever, break mass and throat obstruction. This shows that it has functions of activating blood, dispersing stasis, breaking hardness, eliminating stagnation, descending *qi*, soothing obstruction. Therefore, doctor *Li Shizhen* considers it as blood drug. “*fen lei ben cao yao xing*” points out that it can treat all kinds of poisoning such as food poisoning, and with the help of *wu gong* can treat ulcer, toxin stagnation and tonsillitis. It also can treat snake bite. “*lu chuan ben cao*” says, it can expel wind, clear heat, dredge vessels; it can be used for infantile cold (decoction), hemiplegia (pounded with meat and steamed) and ulcer (external use). It also can resolve toxin, eliminate swelling, expel wind and dredge meridians. “*ban cao gang mu shi yi*” points out that *fei lian* can treat abdominal distention due to *qi* deficiency, tympanites and all kinds of infantile malnutrition; no matter what kind of malnutrition or dying patient, it is effective; after taking baked *fei lian* for once or twice, the patient would be cured, and would be fatter and whiter than before; the patient only smells its fragrance, not fishy; it is effective every time it is used. It can eliminate stagnation and draw food stagnation, supplement spleen and treat malnutrition. It is a good drug for infantile malnutrition. It also can eliminate edema and promote urine. Summarizing its functions, they are: (1) breaking hardness, eliminating stagnation to treat mass, tympanites ; (2) activating blood, dispersing stasis to treat hemiplegia; (3) supplementing spleen, treat malnutrition to treat infantile malnutrition, (4) resolving toxin, treat ulcer to treat carbuncle, furuncle and toxic swelling, external use for snake bite and *wu gong* bite; (5) descending *qi*, soothing obstruction to treat throat obstruction and tonsillitis; (6) promoting urine, eliminating edema to treat edema of beriberi.

The skin of *fei lian* contains selerotin and chitin. Muscle of America cockroach hydrolyzed into all kinds amino acids, cytochrome a,b,c and coenzyme A. East cockroach contains enzymes, such as protein enzyme, amylase, etc.. Grass green mucus secreted by back and tail contains many kinds of proteins.

Fresh or dried imago can be used as drug. After being caught, they are baked or scaled by boiled water, the feet, wings and intestines are removed. It

is usually used as powder. The dose for one day is 2 to 4. They are put into capsules for swallow. Proper dose is used for external use. The clinical applications are:

1) Infantile malnutrition: children have weak stomach and spleen. Unclean food or wrong nursing can injury spleen and stomach, results in failure of spleen and stomach to transport and absorb food and finally malnutrition. The growth of children would be affected. The manifestations are withered hair, yellow complexion, thin body, poor appetite, abdominal distention, addiction to foreign body, saburra, unformed stool with odor, scanty and dark urine, or like to water which rice has been washed, tympanites, restlessness, lower fever, night sweating, usually yellow and greasy or dry coating, and thin and rapid pulse, or thin and slow pulse. The manifestations contain excessive signs and deficiency signs. *Fei lian* not only can supplement spleen and treat malnutrition, but also can eliminate stagnation and draw food stagnation. It is most suitable.

[case] patient *Chen*, male, 5. He has big abdomen, tympanites, thin limbs, thin hair, poor appetite, unformed stool, thin and greasy coating, and thin pulse. He was diagnosed as malnutrition II by other hospital. He had suffered it for half year, and treated for many time without effect. It was severe malnutrition. Single drug was tried.

3 *fei lian* without head, feet, wings and intestines were put into rape oil, picked out, baked into crisp form on the fire, and then grinded into powder. It was taken by two times. Brown sugar also can be added. After 4 days, the appetite was promoted and spirit was good. After another 5 days, the distention of abdomen was eliminated gradually. He was cured after taking drugs for half month.

2) Vomiting, diarrhea and abdomen pain of *sha zheng* (acute gastroenteritis): *sha zheng* in summer and autumn manifests as alternation of vomiting and diarrhea, usually is caused by unclean food, alternation invaders of cold and summer heat and food stagnation. *Fei lian* can promote digestion, draw stagnation, resolve toxin, so it is effective. The effect would be better if it is used as main drug, assisted by *shan yao*, *ye ming sha*, *wu yi*. 1 to 2 *fei lian* can used to feed chicken for pestilence, manifesting as fever, no eating and diarrhea. it is also effective.

[case] patient *Wang*, male, 35, farmer. He slept in the wind after drinking and eating a lot. Due to dysfunction of middle-*jiao* and confusion of clear and turbid substance, he suffered alternation of vomiting and diarrhea, white and greasy tongue, and thin and slippery pulse. The treatment methods were promoting digestion, drawing stagnation, regulating spleen and activating middle-*jiao*. 2 to 3 three live *fei lian* were packed by paper, baked and grinded into powder. It was taken by two times with water. After taking drug, vomiting, diarrhea and abdomen was relieve gradually. He was cured by two days.

3) Ulcer and toxic swelling: *fei lian* can activate blood, disperse stasis, resolve toxin and eliminate stagnation, so it is suitable for ulcer and toxic

swelling. Live *fei lian* is pounded and used to cover the focus.

[case] patient *Li*, male, 41, farmer. He suffered swelling, redness and pain of lower legs for 4 days. It became big gradually. It was not controlled by drugs for eliminating swelling and resolving toxin for external use. He was asked to caught 6 *fei lian*, pound them for external use, once a day. The swelling and pain was relieved next day. He was cured after another 3 days.

4) Poisoning snake bite and *wu gong* bite: *fei lei* has powerful functions of resolving toxin and dispersing stasis, so it can pounded to cover the focus for poisoning snake bite and *wu gong* bite. The author once used it to treat *wu gong* bite and it was effective. But the author has not used it to treat poisoning snake bite yet.

5) Ascites of liver cirrhosis: it is called *dan gu zhang* or *gu zhang* in TCM. It usually is due to liver, spleen and kidney injury, resulting in *qi* stagnation, blood stasis and water retention. *Fei lian* can eliminate mass and stagnation, promote urine and abate edema, so it is suitable for ascites of liver cirrhosis.

[case] patient *Qian*, female, 64, housewife. She suffered chronic hepatitis for more than 5 years. In the recent half year, she had dark complexion, thin body, aggravating hypochondrium pain, poor appetite, increasing abdominal distention, positive shifting dullness, abnormal liver function, inversion rate of albumin and globulin. Liver extended ribs for 1.5cm with II texture. The spleen extended ribs for 3cm with tenderness. She was diagnosed as ascites of liver cirrhosis. The coating was white and greasy, there were petechias in the edge of tongue, and the pulse was thin and wiry. It was due to liver oppression, spleen stagnation, obstruction of *ying* and *wei*, blood stasis and obstruction of water channel. The treatment methods were soothing liver, regulating spleen, attacking hardness, eliminating stagnation, promoting urine and eliminating edema.

Fei lian 20g *ji nei jing* 30g, *di bie chong* 30g, *xi shuai* 20g, *cheng xiang* 10g.

They are grinded into powder, 3g every time, twice a day. After taking drugs for 3 days, abdominal distention, appetite and urine amount were improved. They were good signs. After taking drugs for half months, the diseases was improved, big abdomen was smaller. She was asked to take drugs occasionally, assisted by *fu gan san*. Finally, she was clinical cured.

Prescription appendix

1\ *di dang tang* (wan) (doctor Zhang Zhongjing): *shui zhi*, *meng chong*, *da huang*, *tao ren*

2\ *bie jia jian wan* (doctor Zhang Zhongjing): *bie jia*, *wu shan*, *huang qin*, *chai hu*, *shu fu*, *gan jiang*, *da huang*, *shao yao*, *gui zhi*, *ting ling*, *shi wei*, *hou pu*, *mu dan*, *qu mai*, *zi wei*, *ban xia*, *ren shen*, *he chong*, *e jiao*, *tao ren*, *eng wo*, *chi xiao*, *qiang lang*

3\ *da huang zhe chong wan* (doctor Zhang Zhongjing): *da huang*, *huang qin*, *gan cao*, *tao ren*, *xing ren*, *shao yao*, *di huang*, *gan qi*, *meng chong*, *shui zhi*, *qi cao*, *zhe chong*

4\ *xia yu xue tang* (doctor Zhang Zhongjing): seen to section of *bi bie chong*—

dog bite

5\ da qing gao (liu ke zhu sheng): tian ma, bai fu zi, qing dai, xie wei, wu shao she, zhu shao, tian zhu huang, she xiang

6\ sheng jiang san (doctor Yang Lishan): jiang can, chan tui, jiang huang, sheng da huang, feng mi

7\ ku shen wan (zheng zhi zhun sheng): bai ji li, ku shen, dan shen, sha shen, ren she, fang feng, wu jia pi, wu shao she, man jing zi, gui ban, hu gu, xuan shen

8\ sou feng san (yang yi da quan): jiang xan, quan xie, bo he, qiang huo, du huo, jing jie, ge gen, tian ma, huang bai, ku shen, niu zi, zhi zi, he shou wu, ren shen, fang feng, bai xian pi, huang lian, man jing zi, lian qiao, huang qin, wei ling xian, bai ji li, bai zhi, xian ling pi, gan cao

9\ xiao feng san (zheng zong): chan tui, dang gui, sheng di, fang feng, zhi mu, ku shen, hu ma, jing jie, cang zhu, niu bang zi, shi gao, gan cao

10\ she xiang yuan (doctor Xu Shuwei): seen to section of di long—bai hu li jie

11\ wu long wan (empirical formula): jiu xiang chong, che qian zi, chen pi, bai zhu, du zhong

12\ zhi feng wan (the author): seen to section of zhi zhu—importance

13\ qi ju di huang wan (yi ji): gou qi, gan ju hua, shu di, yu rou, shan yao, yu fu ling, mu dan pi

14\ jie feng dan (shen shi zhun sheng shu): bai fu zi, quan xie, jiang can, nan xing, tian ma, zhu sha, wu gong, she xiang

15\ shen ling bai zhu san (he ji ju fang): bai bian dou, ren shen, bai zhu, bai fu ling, gan cao, shan yao, lian zi rou, jug eng, yi ren, sha ren

16\ bu zhong yi qi tang (wan) (doctor Li Dongyuan): huang qi, gan cao, ren shen, dang gui, chen pi, sheng ma, chai hu, bai zhu

17\ bai lao wan (yi fang kao): dang gui, ru xiang, mo yao, ren shen, da huang, tao ren, meng chong, shui zhui, feng mi

18\ jian xian dan (wei sheng bao jian): fu zi, gui jian yu (or chuan shan jia), zi shi ying, ze xie, rou gui, yan hu suo, mu xiang, bing lang, xue jie, shui zhi, tao ren, jing san leng

19\ hua zhen hui sheng dan (doctor Wu Jutong): ren shen, an nan gui, liang tou jian, she xiang, pian jiang huang, gong ding xiang, chuan jiao tan, meng chong, jing san leng, pu gong ying, zang hong hua, sum u, tao ren, su zi shuang, wu ling zhi, jiang zhen xing, gan qi, dang gui wei, mo yao, bai shao, xing ren, xiang fu mi, wu zhu yu, yan hu suo, shui zhi, a wei, xiao hui xiang tan, chuan xiong, ru xiang, mo yao, liang jiang, ai tan, yi mu gao, shu di huang, bie jia jiao, da huang, feng mi

20\ ru ai san (yan fang xin bian): seen to section of feng fang—cancer

21\ feng fang gao (zheng zhi zhun sheng): seen to section of feng fang—carbuncle, furuncle and toxin swelling

22\ xiao zhong hua du gao (shou shi xin bian): seen to section of feng fang—carbuncle, furuncle and toxin swelling

23\ yang he tang (wai ke quan shen ji): shu di, bai jie zi, lu jiao jiao, rou gui,

jiang tan, ma huang, sheng gan cao

24\ yu long gao (wai ke zheng zong): cao wu, jun jiang, chi shao, bai zhi, nan xing, rou gui

25\ zhu zhu san (jin kui yao lve): da zhi zhu, rou gui

26\ qiang lang san (wan bing hui chun): qiang lang, upper part for constipation, lower party for retention of urine

27\ xuan fu dai zhe tang (shang han lun): xuan fu hua, ren shen, sheng jiang, dai zhe shi, gan cao, ban xia, da zao

28\ si mo yin (ji sheng fang): ren shen, bing lang, chen xiang, wu yao

29\ ba jiang dan (yang yi da quan): xi niu huang, bing pian, chan yi, wu gong, she xiang, chuan shan jia, quan xie, wu bei zi

30\ shi quan da bu tang (yi xue fa ming): dang gui, chuan xiong, bai shao, shu di, ren shen, bai zhu, fu ling, gan cao, huang qi, rou gui

31\ bu yang huan wu tang (doctor Wang Qingren): seen to section of di long—sequelae of stroke

32\ liu wei di huang wan (xiao er yao zheng zhi jue): shu di, yu rou, shan yao, ze xie, fu ling, dan pi

33\ di long san (sheng hui fang): di long, xi yi, chuan xiong, gui xin, gan jiang, sum u, mu xiang, pu huang, dan pi, shui zhi, tao ren

34\ xun luo wan (qi xiao liang fang): di long , ru xiang, mo yao, huh u, gui ban, wu ling zhi, dang gui, bai fu zi, tian ma, quan xie, nan xing, fu zi, chuan wu, du zhong, niu qi, wei ling xian, wu she, cong rong, zhu sha, xu duan

35\ zhuo hu dan (shen shi zhun sheng shu): wu ling zhi, bai jiao, cao wu, mu bie zi, di long, mo yao, ru xiang, dang gui, she xiang, jing mo

36\ di tong wan (zheng zhi zhun sheng): wei ling xian, mu bie zi, chuan wu, fang feng, bai zhi, wu ling zhi, di long, shui zhi, zhu sha

37\ liu yi san (xuan ming lun): hua shi, gan cao

38\ liu shen wan (lei shi fang): xi huang, yao huang, zhu fen, she xiang, bing pian, chan su

39\ chan su wan (wai ke zheng zong): seen to section of chan su—furuncle, back carbuncle, mastitis and other severe ulcer

40\ mei hua dian she dan (quan sheng ji): ru xiang, mo yao, peng sha, ming xiong huang, xiong dan, xue jie, ting li, chen xiang, bing pian, she xiang, zhe sha, xi niu huang, zhen zhu

Identification key for selecting prescriptions and drugs in clinic

Internal medicine

1. influenza: seen to jiang can 1
2. tonsillitis: seen to quan xie 14, yan you 10, bi qian mu 1
3. diphtheria, seen to throat carbuncle: yan you 2, chan chu 5
4. encephalitis B: seen to quan xie 3, chan yi 6, wo niu 6, wu shao she 6, ban mo 7
5. chronic bronchitis: seen to wu gong 18, feng fang 13, zhi zhu 11, chan chu 10, ge jie 2, shu fu 5, wu bei zi 3
6. asthma: seen to jiang cn 10, chan yi 8, di long 1, yan you 1, ge jie 1, wu

ling zhi 4

7. chronic pharyngitis: seen to jiang can 7, qi cao 1, bi qian 2
8. poliomyelitis: seen to di long 13, wu shao she 9
9. malaria: seen to ban mao 12, shu fu 2
10. dysentery: seen to qiang lang chong 10, wu bei zi 4
11. cholera: seen to chan sha 1, fei lian
12. migraine: seen to quan xie 1
13. lung tuberculosis: seen to quan xie 8, di bie chong 7, fu she 2, shou gong 1, ge jie 3
14. high blood pressure: seen to di long 5
15. peptic ulcer: seen to di long 5
16. stomach pain: seen to jiu xiang xiong 1
17. hematemesis: seen to can tui zhi 1, wu bei zi 5, qi cao 1, bi qian 1
18. sequelae of stroke :seen to di long 12, wu shao she 12
19. antral gastritis: seen to ban mao 14
20. diabetes ; seen to jiang can 14
21. arthritis ; seen to can sha 3, feng fang 7,10,11, di long 8, fu she 3, ban mao 5, qi cao 3
22. RA: seen to quan xie 12, jiang can 11, wu shao she 1, fu she 3, feng fang 10
23. hyperplasia spondylitis: seen to quan xie 1, feng fang 10
24. sciatica: seen to di bie chong 9, fu she 3
25. lower back pain: seen to di bie chong 10, jiu xiang chong 6, sang piao xiao 4
26. hepatitis: seen to di bie chong 1, jiu xiang chong 2, ban mao 3, qi cao 2
27. ascites of liver cirrhosis: seen to qiang lang chong 3, chan chu 3,4, lou gu 3, xi shuai 4, fei lian 5
28. gallbladder stone: seen to jiu xiang chong 5
29. rheumatic heart disease: seen to shui zhi 2
30. coronary disease: seen to shui zhi 3, wu ling zhi 3
31. heart failure: seen to chan su 1, chan pi 6
32. sinus syndrome: seen to di long 24
33. tubercular meningitis: seen to quan xie 3
34. nerve and mobile system diseases: seen to quan xie 13
35. facial paralysis: seen to wu gong 1, jiang can 3
36. epilepsy: seen to wu gong 3, jiang can 9, can yong, di long 4
37. hernia: seen to wu gong 10, feng fang 2, zhi zhu 1
38. nephritis: seen to wu gong 19, chan chu 3, lou gu 4, xi shuai 2, hai ma 4
39. retention of urine ; seen to lou gu 2
40. uremia : seen to lou gu 4, xi shuai 6
41. anuria: seen to lou gu 8, xi shuai 1
42. edema: seen to chan yi 3
43. stone in urine system: seen to di long 21, lou gu 7
44. urticaria: seen to jiang can 6, chan sha 6, chan yi 8,11, di long 11, wu shao

she 8

45. silicosis: seen to chan yi 12
46. cysticercosis: seen to chan yi 13, she tui 2
47. Thrombocythemia after lienectomy: seen to di bie chong 4
48. importance: seen to feng fang 14, zhi zhu 12, xi shuai 3, ge jie 4, hai ma 5, sang piao xiao 3
49. premature ejaculation: seen to di long 20
50. bloody stool: seen to zhi zhu 6
51. hydrophobia: seen to di bie chong 5
52. drug rash: seen to di long 16
53. leprosy: seen to bai hua she 4, fu she 4, chan chu 10
54. muscle atrophy: seen to wu shao she 5
55. drug poisoning: seen to can tui zhi 4
56. nocturnal emission: seen to sang piao xiao 2, wu bei zi 2
57. frequent urine: seen to sang piao xiao 5
58. spontaneous and night sweating: seen to wu bei zi 1

Gynecology

1. cyclomastopathy: seen to jiang can 13
2. amenorrhea: seen to can sha 2, shu fu 1, qi cao 5
3. uterus bleeding: seen to can sha 5, can tui zhi 6, zi cao rong 3
4. contraception: seen to can tui zhi 8, di long 14, yan you 9, wo niu 4
5. hysteromyoma: seen to shui zhi 1
6. induced labor: seen to shui zhi 6
7. leucorrhea: seen to feng fang 6, hai ma 2, wu bei zi 8
8. vulva white spots: seen to ban mao 10
9. retention of placenta: seen to lou gu 6
10. dystocia: seen to xi shuai 5
11. dysgenesis due to cold uterus: seen to xi shuai
12. *er zhen tong*: seen to wu ling zhi 1
13. dysmenorrhea: seen to wu ling zhi 2

Pediatrics

1. infantile dyspepsia: seen to wu gong 6, zhi zhu 10, qiang lang chong 8
2. pertusis: seen to wu gong 9, chan yi 4, feng fang 16, zha meng 2
3. infantile convulsion: seen to jiang can 5, chan yi 1, di long 3, yan you 8, zha meng 1
4. infantile summer fever: seen to can jian
5. measles: seen to chan yi 14, zi cao rong 1
6. enuresis: seen to feng fang 4, sang piao xiao 1, wu bei zi 6
7. mumps: seen to di long 6, wo niu 3, she tui 1, chan chu 6
8. infantile malnutrition: seen to fei lian 1

Surgery

1. tetanus: seen to quan xie 2, chan yi 2, bai hua she 3
2. enlarged lymph node: seen to quan xie 4,9 wu gong 2, jiang can 4, shui zhi 8, yan you 3, wo niu 2, she tui 3, shou gong 1,6 ban mao 6, 13

3. multiple abscess: seen to quan xie 9, feng fang 2,7 qiang lang chong 6, 12, wu shao she 11, she tui 3, ban mao 4, 13, chan chu 8, hai ma 1
4. carbuncle: seen to quan cie 9, wu gong 16, chan yi 7, feng fang 3, zhi zhu 9, yan you 6, fu she 1, she tui 3, shou gong 7, chan su 2,3,10, chan chu 9, 10, chan pi 7, wu bei zi 10, zi cao rong 2, fei lian 3
5. osteomyelitis: seen to wu gong 15, feng fang 7, chan su 6
6. eczema: seen to quan xie 10, chan yi 11, di long 15, zi cao rong 3
7. psoriasis: seen to jiang can 8, bai hua she 10, ban mao 3
8. neurodermatitis: seen to ban mao 9
9. sarcoptic mange: seen to she tui 11, chan chu 7
10. fungus infection of palm (e zhang feng): seen to ban mao 11
11. alopecia: seen to ban mao 15, wu gong 17
12. coma due to trauma: seen to di bie chong 2
13. cerebral concussion: seen to di bie chong 6
14. bone fracture: seen to di bie chong 3, di long 9
15. paraplegia: seen to di long 17, wu shao she 7
16. trauma: seen to shui zhi 7,9, meng chong 2, di long 10, qi cao 6, chong bai la 5, bi qian mu 2
17. furuncle: seen to feng fang 15, zhi zhu 2, yan you 7, chan su 10
18. mastitis: seen to wu gong 5, she tui 9, chan su 10
19. flowing fire: seen to quan xie 6, wu gong 2, di long 18
20. peritendinitis: seen to zhi zhu 4
21. underarm odor: seen to zhi zhu 7
22. intestine synechia: seen to jiu xiang chong 3, qiang lang chong 2
23. intestine obstruction: seen to qiang lang chong 1
24. bed sore: seen to hai ma 6
25. burn and scald: seen to quan xie 7
26. herpes zoster: seen to bai hua she 2, she tui 6
27. ectopic pregnancy: seen to wu gong 12, di bie chong 4, wu ling zhi 5
28. ulcer in lower limbs: seen to wu gong 13, di long 7, yan you 4, wo niu 5, shou gong 9
29. fistula: seen to qiang lang chong 7, fu she 4, shou gong 8, hai ma 1
30. popular urticaria: seen to chan che 5
31. infantile summer furuncle: seen to hai ma 3
32. *lou jing chuang*: seen to quan xie 5
33. poisoning snake bite: seen to wu gong 4, shou gong 5, wu ling zhi 6, fei lian 4
34. helosis: seen to wu gong 8
35. scar hyperplasia: seen to jiang can 12
36. gum bleeding and gum carbuncle: seen to can tui zhi, feng fang 8
37. toothache: seen to can tui zhi 3, ban mao 11
38. hemorrhoids and hemorrhoids fistula: seen to can tui zhi 7, chan yi 10, di bie chong 8, zhi zhu 13, yan you 5, wo niu 1, she tui 10
39. prolapse of anus: seen to chan yi 5, wu bei zi 7

40. toxic insect bite: seen to zhi zhu 3
41. pinprick: seen to she tui 4
42. otitis medis: seen to she tui 5
43. local anaesthesia: seen to chan su 7
44. vasculitis: seen to feng fang 5, di long 19
45. trachoma: seen to di long 23
46. comea nebula: seen to chan yi 9, she tui 8
47. viral blister: seen to wu gong 20
48. stomatitis, thrush and gingivitis: seen to shu fu 3, wu bei zi 9
49. nebula, *que mu*: seen to ye ming sha 1,2
50. blepharitis ciliaris: seen to wu bei zi 11
51. *qing mang*: seen to ying huo chong 1
52. ulcerative gingivitis: seen to bi qian 3

Tumor

1. malignant lymphoma: seen to quan xie 11
2. cancer mass: seen to quan xie 12, feng fang 1, chan chu 10
3. acute leucorrhoea: seen to quan xie 15, chan chu 1, chan pi 5
4. skin cancer: seen to wu gong 14
5. melanoma: seen to di bie chong 12
6. nasopharyngeal carcinoma: seen to di bie chong 11, chan pi 3
7. esophageal cancer: seen to shui zhi 5, shou gong 3, ban mao 1,2, cha chu 2, chan pi 1,5
8. lung cancer: seen to feng fang 1, shou gong 2, ban mao 1
9. liver cancer: seen to ban mao 1, chan pi 5
10. stomach cancer: seen to jiang can 2, jiu xiang chong 4, qiang lang chong 4, chan su 8, chan chu 2, chan pi 2
11. breast cancer: seen to feng fang 1, ban mao 1
12. bladder cancer: seen to qiang lang chong 5
13. rectum cancer: seen to ban mao 1, chan su 8,9
14. cervical cancer: seen to wu gong 11, meng chong 1, chan su 9, chan pi 4
15. chorionepithelioma: seen to feng fang 9