Famous Doctor's Experience

# Chief physician Zhang Tang-fa's experience of acupuncture for gouty arthritis

# 张唐法主任医师针灸治疗痛风性关节炎经验

Li Yue-bing (李跃兵)<sup>1</sup>, Wei Wei (魏巍)<sup>2</sup>

- 1 Hunan University of Chinese Medicine, Changsha 410208, China
- 2 General Hospital of the Yangtze River Shipping, Wuhan 430000, China

#### Abstract

Skillful in the treatment of gouty arthritis (GA) by integrated therapies of Chinese and Western medicine, chief physician Zhang Tang-fa proposes to 'deal with the exterior with the needles, and attack the interior with the drugs, by integrated application of acupuncture and herbal medicine', in combination with comprehensive intervention of dietetic therapy and health education. In the treatment of GA, he adopts the syndrome differentiation based upon the pathogenic factors, in combination of syndrome differentiation based upon the six meridians, to reinforce and benefit the spleen and kidney, clear away heat and remove dampness as the therapeutic principle. By acupuncture mainly at the acupoints of the Spleen and Liver Meridians, he also proposes to select the acupoints by the theory of Na Zi Fa (earthly branch method) of Zi Wu Liu Zhu (midnight-noon ebb-flow), and to puncture the surrounding area of the involved joints shallowly by multiple needles as the major needling method, simultaneously with the reinforcing and reducing manipulations based upon the respiration. In the treatment, acupuncture and acupoint-injection are often used. In diet, low purine diet is often suggested. In health education, the patients are often instructed to understand the disease correctly, eliminate fears and cooperate with doctor's treatment positively.

**Keywords:** Acupuncture Therapy; Moxibustion Therapy; Acupuncture-moxibustion Therapy; Arthritis, Gouty; Famous Doctor's Experience; Zhang Tang-fa

【摘要】张唐法主任医师善于采用中西医结合治疗痛风性关节炎(GA), 倡导针治其外、药攻其内、针药并用, 配以食疗、健康教育等综合干预方式。在治疗GA时, 他采用病因辨证结合六经辨证, 以补益脾肾, 清热利湿为治则; 针灸脾经、肝经穴为主, 并倡导子午流注纳子法取穴; 以多针浅透刺受累关节周围为主要针刺方法, 同时采用呼吸补泻手法。治疗时常采用针刺、穴位注射的方法。饮食上以低嘌呤饮食为主。健康教育方面倡导患者正确认识疾病, 消除恐惧心理, 积极配合医生治疗。

【关键词】针刺疗法; 灸法; 针灸疗法; 关节炎, 痛风性; 名医经验; 张唐法

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Chief physician Zhang Tang-fa is the director of Acupuncture Department of Wuhan No. 1 Hospital, a tutor of master degree candidate, the deputy president of Acupuncture Association of Hubei province, and the instructor of National Fourth Group of Senior Chinese Medicine Experts for

Inheritance of Academic Experience. Prestigous in Hubei province, he used to be awarded with the honorable title 'Master of Chinese Medicine in Hubei Province' [1-3].

Author: Li Yue-bing, M.M., lecturer Corresponding Author: Wei Wei, M.M., attending physician. E-mail: 873087947@qq.com



Director Zhang learned from Yang Jun-bo, a famous acupuncturist in Shanghai, for over 4 years and obtained real instruction from his teacher. He graduated from the Chinese Medicine Course of Shanghai Health Bureau in 1966 and then was assigned to be engaged in clinical, research and teaching profession of Chinese medicine and acupuncture in Wuhan No.1 Hospital for over 50 years. He has gradually formed his own unique clinical thinking and therapeutic methods from the long-term practice, and travelled to many countries like Algeria to guide the clinical practice of acupuncture in the local areas, making certain contribution to global popularization of Chinese acupuncture<sup>[4]</sup>.

Gouty arthritis (GA) is a metabolic disease characterized by metabolic disturbance of purine inside the human body due to genetic and environmental factors and elevation of uric acid in blood, by inflammatory reaction due to accumulation of urate in the tissues of the joint capsule, synovial membrane and cartilage, and is mostly seen in males above 40. GA mostly occurs in the small joints of the human body, particularly in the ankle and foot joints. Clinically, GA is mainly treated with non-steroid anti-inflammatory drugs. But this type of drugs is easy to induce adverse reaction in the digestive tract and damage the hepatic functions. Director Zhang has treated GA by acupuncture for many years and has gathered rich clinical experience in diagnosis and treatment [5-8]. As a master degree candidate of Zhang, I have been studying with my teacher for 3 years. Now, his beneficial experience in acupuncture treatment of GA is summarized as follows.

### 1 Treatment Based on Syndrome Differentiation

With profound study of the four classics of traditional Chinese medicine, Zhang believes that this disease belongs to Bi-impediment syndrome and acute arthritis Chinese medicine based upon syndrome differentiation. In terms of the etiology and pathogenesis of GA, the medical masters in successive dynasties classified it as dampness, heat, blood stasis. In accordance with his clinical experience, Zhang believes that the etiology and pathogenesis of this disease are related to internal reason and external factors. The internal factors include the abnormal prenatal endowment of spleen and stomach, dysfunction of the spleen in transportation ability, and poor circulation of qi movement, leading to accumulation of water, dampness and phlegm inside the body. The external factors include improper food ingestion, and over intake of greasy and sweet food, causing damage to the spleen and stomach and dysfunction of gi movement, and hence resulting in conversion of the long-term accumulated water inside the body into toxin, which goes with the circulation of qi into the joints, further inducing this disease. The obstruction of pathogenic toxin in the joints induces joint pain. The accumulation of phlegm would produce gout stones or stone in the urinary tract<sup>[9-10]</sup>. Zhang points out that this disease is not closely related to external affection of six exogenous pathogens, and is neither different from Bi-impediment syndrome caused by deficiency of body constitution plus infection of pathogenic wind, cold and dampness, and that main etiology and pathogenesis are related to improper food ingestion, dysfunction of the spleen in transportation, dysfunction of the kidney in gi transformation, poor circulation of gi, and internal accumulation of water, dampness, phlegm and blood stasis, becoming pathogenic toxin, which flows into the joints and causes the problem. The disorder in renal functions is the main factor and improper food ingestion is an inducing factor. In terms of the

therapeutic principle, it is necessary to focus on the spleen and kidney, by reinforcing and benefiting the spleen and kidney, clearing away heat and removing dampness in predominance. Zhang believes that the treatment of GA is not just simply to clear away heat and remove dampness, but to reinforce and benefit the spleen and kidney, to clear away heat, remove dampness, dissolve phlegm and eliminate the turbidity, so as to maintain smooth circulation of qi and normal metabolism of water, dampness and phlegm and fluid, for realizing the therapeutic purpose<sup>[11]</sup>.

# 2 Selecting the Acupoints Mainly from the Three Yin Meridians of Foot, Proposing Acupoints-selection Based on Zi Wu Liu Zhu (Midnight-noon Ebb-flow)

Zhang treats GA mainly using the acupoints from the three yin meridians of foot, mostly from the Spleen Meridian of Foot Taiyin, plus the local acupoints of Taichong (LR 3), Taibai (SP 3), Taixi (KI 3), Zhaohai (KI 6) and Sanyinjiao (SP 6), and remote acupoints of Yinlingquan (SP 9), Zusanli (ST 36) and Xuehai (SP 10). Xuehai (SP 10) is supposed to expel wind and dredge the collaterals, selected in the implication to 'treat blood before treating wind, and wind would go out as soon as blood flows'. Sanyinjiao (SP 6), a crossing acupoint of Meridians of Liver, Spleen and Kidney, is supposed to circulate qi and blood, dredge the collaterals and stop pain. It has been proved by modern study that Sanyinjiao (SP 6) is able to enhance the metabolic function of the kidney<sup>[12]</sup>.

Zhang studies Zhen Jiu Da Cheng (Complete Compendium of Acupuncture and Moxibustion) profoundly and is skillful in treating diseases by needling method of Zi Wu Liu Zhu (Midnight-noon Ebb-flow). For GA patients with clear onset time, Zhang can obtain better therapeutic effects by following the flowing rules of qi and blood, in combination of his clinical experience and acupoint-selection based upon the theory of Na Zi Fa (earthly branch method) of Zi Wu Liu Zhu (midnight-noon ebb-flow)<sup>[13]</sup>. There was a male GΑ patient, with serious pain in the first metatarsophalangeal joint of the right foot, and the pain was intolerable and usually attacked around 5 to 7 every afternoon, with visible urate crystal in the painful area. Many treatments failed. Master Zhang selected Yongquan (KI 1) and Taixi (KI 3) and gave acupuncture treatment during the time period of the tenth earthly branch (5:00-7:00 p.m.). The patient's pain was alleviated after one treatment and disappeared after three treatments. The meridian qi of the Kidney Meridian is most exuberant during the time period of the tenth earthly branch, and GA is closely related to the kidney in the etiology and pathogenesis, and the pathogenic location is also on the pathway of the Kidney Meridian. Therefore, Yongquan (KI 1), the son acupoint of the Kidney Meridian of Foot Shaoyin, was selected and punctured with reducing manipulation, assisted by Taixi (KI 3) in the painful location. After the treatment by selecting the acupoint based upon the theory of Na Zi Fa (earthly branch method) of Zi Wu Liu Zhu (midnight-noon ebb-flow), the therapeutic effects were remarkable<sup>[14]</sup>.

## 3 Adopting Shallow Acupoint-towards-acupoint Needling with Multiple Needles, Combining with Reinforcing and Reducing Manipulations by Respiration

In the treatment of GA by shallow acupoint-towards-acupoint needling with multiple needles in the local area, Zhang believes that the acupoint-towards-acupoint needling can reduce the number of the acupoints and enlarge the effects of acupuncture, strengthen the stimulation and also easily expand the needling sensation<sup>[15]</sup>. Taixi (KI 3) is punctured shallowly towards Zusanli (ST 36), Sanyinjiao (SP 6) is punctured shallowly towards Yinlingquan (SP 9), and Taibai (SP 3) is punctured shallowly towards Taichong (LR 3), for exciting the circulation of qi and blood, enlarging the therapeutic area, alleviating pain and promoting the restoration of the functions of the spleen and stomach.

By the ancient acupuncture theory, Zhang uses the reducing manipulation by respiration in the treatment of GA, i.e. inserting the needle upon inspiration and withdrawing the needle upon expiration, and twisting the needle after the arrival of the needling sensation and stopping manipulation upon expiration. Zhang believes that the reinforcing-reducing manipulations by respiration should be combined with qi movement of the whole body, to ensure more remarkable effects<sup>[16]</sup>. Zhang proposes to retain the needles for 20 min and believes that this period of time is able to realize the goal to treat the disease and leave time for other therapeutic methods.

# 4 Proposing the Comprehensive Treatment of Acupuncture and Medications

Zhang proposes the comprehensive therapeutic method to 'deal with the exterior with the needles, and attack the interior with the drugs by integrated application of acupuncture and herbal medicine' [17-18]. He uses Si Miao San (Four Marvels Powder) together with modified Huo Luo Xiao Ling Dan (Fantastically Effective Pill to Invigorate the Collaterals), including Tu Fu Ling (Rhizoma Smilacis Glabrae) 50 g, Yin Hua Teng (Caulis Lonicerae) 30 g, Wei Ling Xian (Radix Clematidis) 15 g, Di Long (Lumbricus) 15 g, Jiang Can (Bombyx Batryticatus) 10 g, Yi Yi Ren (Semen Coicis) 50 g, Huang

Bai (Cortex Phellodendri) 12 g, Cana Zhu (Rhizoma Atractylodis) 15 g, Niu Xi (Radix Achyranthis Bidentatae) 15 g, Ru Xiana (Olibanum) 12 g, Mo Yao (Myrrha) 12 g, Dang Gui (Radix Angelicae Sinensis) 12 g, Dan Shen (Radix Salviae Miltiorrhizae) 15 g, Bai Shao (Radix Paeoniae Alba) 30 g, Mu Gua (Fructus Chaenomelis) 15 g, Ze Xie (Rhizoma Alismatis) 10 g, Han Fang Ji (Radix Aristolochiae Heterophyllae) 15 g, Yuan Hu (Rhizoma corydalis) 10 g, Bai Zhi (Radix Angelicae Dahuricae) 10 g, Mu Dan Pi (Cortex Moutan Radicis) 10 g, Gan Cao (Radix Glycyrrhizae Preparata) 6 g. Because GA patients usually present serious pain at night, and the problem involves blood system, Huo Luo Xiao Ling Dan (Fantastically Effective Pill to Invigorate the Collaterals) is used. Because GA patients often present spasm in the muscles and tendons with pain, Shao Yao Gan Cao Tang (Peony and Licorice Decoction) is added with Mu Gua (Fructus Chaenomelis) for soothing the tendons and stopping pain. Because of intolerable serious pain, Yuan Hu (Rhizoma corydalis) and Bai Zhi (Radix Angelicae Dahuricae) are added to stop pain. Because of tumefaction in the local area, Ze Xie (Rhizoma Alismatis) and Han Fang Ji (Radix Aristolochiae Heterophyllae) are added to remove dampness and eliminate tumefaction. Mu Dan Pi (Cortex Moutan Radicis) is used to activate blood, clear away heat and stop pain.

At the same time, hydro-acupuncture is also proposed, i.e. acupoint-injection method. Compound Dan Shen (Radix Salviae Miltiorrhizae) injection is used, 0.5-1.0 mL for each acupoint, once every other day, for three times per week. The needling sensation is comparatively stronger in the treatment by hydro-acupuncture. Moreover, Compound Dan Shen (Radix Salviae Miltiorrhizae) injection is able to activate blood, dissolve blood stasis, dredge the collaterals and stop pain, and able to enlarge the therapeutic area and strengthen the therapeutic effect in combination of acupuncture.

# 5 Emphasizing Health Education and Diet Regulation

In reference to the beneficial experience of traditional medicine and modern medicine, Zhang is very good to communicate with the patients, to eliminate the patient's fear and anxiety and help the patient to build up the correct view about disease and win the patient's trust. Therefore, the patients could positively cooperate with Zhang in the treatment, leading to better therapeutic effects in acupuncture treatment<sup>[19]</sup>. In dietetic therapy, Zhang suggests low-purine diet for GA patients, telling the patients to follow the principles: sufficient volume of carbohydrate and fat, more stewing, boiling, steaming and blenching, less fries, more food with rich vitamin B<sub>1</sub> and vitamin C,

such as rice, noodle, milk, egg, fruits and various vegetable oil, no liver, kidney, brain, clam, crab, fish, meat broth, chicken soup, peas, lentils, mushroom, asparagus, celery, cauliflower, spinach, alcohol, tea, coffee, and chilly stuffs.

## **6 Case Study**

A male patient, 41 years old, first visited on May 6th, 2008.

Complaints and current history: Pain in the bilateral first metatarsophalangeal joints, accompanied by fever for one month, attacking every time after ingestion of bean foodstuff or alcoholic drinks, and serious and intolerable pain during the attack, with the second metatarsophalangeal joint and ankle involved. After onset, the patient presented poor appetite, reduced body weight, poor sleep, normal urination and defecation, a red tongue with yellow and sticky coating, a thready and rapid pulse. Lab test in Western hospital showed blood uric acid at 563 mmol/L.

Diagnosis: GA.

Therapeutic method: Acupuncture treatment was given together with acupoint-injection method and herbal medicine. The acupoints were Taichong (LR 3), Taixi (KI 3), Zusanli (ST 36), Sanyinjiao (SP 6), Yinlingquan (SP 9), and Taibai (SP 3). The needling method was as follows, Taixi (KI 3) toward Zusanli (ST 36), Sanyinjiao (SP 6) toward Yinlingquan (SP 9), Taibai (SP 3) toward Taichong (LR 3), with the needles retained for 20 min. Compound Dan Shen (Radix Salviae Miltiorrhizae) injection was used for acupoint-injection method. After the injection was mixed with 5% glucose by ratio of 1:10, 0.5-1.0 mL was injected into each acupoint, and 2 or 3 acupoints were selected each time from the above acupoints. Acupuncture and acupoint-injection method were given once every other day, three sessions per week, and two weeks as one course. Chinese herbal medicines used were Si Miao San (Four Marvels Powder) plus modified Huo Luo Xiao Ling Dan (Fantastically Effective Pill to Invigorate the Collaterals), including Tu Fu Ling (Rhizoma Smilacis Glabrae) 50 g, Yin Hua Teng (Caulis Lonicerae) 30 g, Wei Ling Xian (Radix Clematidis) 15 g, Di Long (Lumbricus) 15 g, Jiang Can (Bombyx Batryticatus) 10 g, Yi Yi Ren (Semen Coicis) 50 g, Huang Bai (Cortex Phellodendri) 12 g, Cang Zhu (Rhizoma Atractylodis) 15 g, Niu Xi (Radix Achyranthis Bidentatae) 15 g, Ru Xiang (Olibanum) 12 g, Mo Yao (Myrrha) 12 g, Dang Gui (Radix Angelicae Sinensis) 12 g, Dan Shen (Radix Salviae Miltiorrhizae) 15 g, Bai Shao (Radix Paeoniae Alba) 30 g, Mu Gua (Fructus Chaenomelis) 15 g, Ze Xie (Rhizoma Alismatis) 10 g, Han Fang Ji (Radix Aristolochiae Heterophyllae) 15 g, Yuan Hu (Rhizoma corydalis) 10 g, Bai Zhi (Radix Angelicae Dahuricae) 10 g, Mu Dan Pi (Cortex Moutan Radicis) 10 g, and Gan Cao (Radix Glycyrrhizae Preparata) 6 g, totally 14 packs,

water decoction, one dose per day. At the return visit after two weeks, the patient's blood uric acid was 241 mmol/L, in the normal scope. One month later, the patient's blood uric acid was still in the normal range.

### 7 Summary

Under the guidance of treatment based on syndrome differentiation theory in Chinese medicine, Zhang treats GA by the therapeutic method the advantage of various schools, mostly combining holistic regulation and comprehensive treatment. He puts forward the following notes in acupuncture treatment of GA: be clear about the causative factor and adopt the symptomatic treatment first of all, then correctly use the reinforcing and reducing technique by respiration, combine the acupoint selection based upon the Na Zi Fa (earthly branch method) in Zi Wu Liu Zhu (midnightnoon ebb-flow), and thirdly correctly use the shallow penetrating method, pay attention to the direction, strength and depth of the needle insertion, and to the intensity of the needling stimulation, and finally combine acupoint-injection method and Chinese herbal medicine, use the acupoints alternatively in acupointinjection method, and apply herbal formula by the theory of syndrome differentiation.

### **Conflict of Interest**

The authors declared that there was no potential conflict of interest in this article.

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Translator: Huang Guo-qi (黄国琪)