REGULATION AND GUIDELINE

Clinical Practice Guideline of Acupuncture for Herpes Zoster*

LIU Zhi-shun (刘志顺)¹, PENG Wei-na (彭唯娜)¹, LIU Bao-yan (刘保延)², WANG Jing (王 晶)¹, WANG Yang (王 杨)¹, MAO Mei (毛 湄)¹, DENG Yan-hua (邓艳华)¹, YU Jin-na (于金娜)¹, LIAW Yoekleng, Alen (廖育麟)¹, MU Yan (穆 岩)¹, LUO Yun (罗 云)¹, XIAO Xiao-ling (肖晓玲)¹, WU Xiao-dong (武晓东)², and ZI Ming-jie (訾明杰)² for the Herpes Zoster Guideline Development Group

BACKGROUND

Herpes zoster (HZ), also called shingles, zona and zoster, is a painful skin rash. It is a distinctive syndrome caused by reactivation of varicella zoster virus (VZV). The reaction occurs when immunity to VZV declines because of aging or immunosuppression. At this time the virus infects nerves (namely, the dorsal root ganglia) where it remains latent for years. It occurs in about one million people in the United States annually. In China, few studies reported the prevalence of HZ and one article has mentioned the number was 1.4‰–4.8‰.

The major complication of HZ is pain, particularly post-herpetic neuralgia (PHN) which has a marked impact on daily activities and quality of life. When the pain is prolonged, PHN can accelerate functional decline. (4) Episodes of HZ are generally self-limited. Drugs are used to reduce the extent and duration of symptoms and the risk of PHN. There are three antiviral drugs approved worldwide-famciclovir, valacyclovir and acyclovir. They can decrease the incidence of new lesion formation and accelerate healing and the resolution of acute pain. Besides, corticosteroids and narcotic analgesics are used to control pain. Corticosteroids have a clinically significant benefit on acute pain but no demonstrable effect on PHN. (5,6) Acupuncture therapy could accelerate healing and reduce pain and incidence of PHN in vesicular phase. In PHN phase, it can reduce pain and discomfort in most patients and remove pain and discomfort in some patients.

CLINICAL CHARACTERISTICS

Clinical Manifestations

HZ is usually divided into 4 phases: prodromal phase, vesicular phase, encrustation phase and PHN phase.

• Prodromal phase: (7) It lasts for 3 to 5 days, presents with fatigue and low fever. Some may complain of different degrees of pain, sometimes

described as a burning or unusual sensation.

- Vesicular and encrustation phase:⁽⁷⁾ During vesicular phase, papules range in size from millet to mung bean appear in non-coalescent patches, developing into vesicles over red macular base, with clear fluid within glistening, tense walls of the vesicles. In patients of normal immunity, the period from the first appearance of vesicle to its disappearance lasts about 10 days; in immunocompromised patients, this period may last for months with frequent outcropping of new batches of vesicles with eventual scarring after recovery.
- PHN phase:⁽⁸⁻¹⁰⁾ It refers to presence of pain lasting for more than 3 months after recovery from the acute HZ infection.

Laboratory Examination

A typical case of HZ is easy to diagnose according to the symptoms and medical history. When the clinical diagnosis of HZ is not obvious, clinicians should order confirmatory laboratory testing. The testing includes: (1) Viral culture: A viral culture is 30% to 70% sensitive and 100% specific for VZV. (2) Polymerase chain reaction (PCR): PCR can be used to detect the DNA in fluid taken from the vesicles. (3) Antigen detection: It is more sensitive than viral culture and is a suitable alternative when PCR is not available. (4) Serology: enzyme-linked immunosorbant assay (ELISA) or latex agglutination methods could be used. (6)

DOI: 10.1007/s11655-013-1191-y

[©]The Chinese Journal of Integrated Traditional and Western Medicine Press and Springer-Verlag Berlin Heidelberg 2013 *Sponsored by Traditional Medicine Office, Western Pacific Region, World Health Orgnization

^{1.} Department of Acupuncture, Guang'anmen Hospital, China Academy of Chinese Medical Sciences, Beijing (100053), China; 2. China Academy of Chinese Medical Sciences, Beijing (100091), China

Correspondence to: Prof. LIU Zhi-shun, Tel: 86-10-8001124, E-mail: liuzhishun@yahoo.com.cn

DIAGNOSIS CRITERIA

Diagnosis in Western Medicine and Chinese Medicine

Davidson's Principle and Practice of Medicine⁽¹¹⁾ (2000 edition)

- Main symptom is persistent pain along the cutaneous distribution of the affected nerve. After 3 to 4 days, rashes and vesicles appear on the skin surface of the affected area. After Five to 6 days later, the vesicles dry up, leaving small scars. With the disappearance of the vesicles, pain usually subsides as well. In some cases, neuralgia may be persisted after the recovery of skin lesions.
- Any nerve may be affected but the truncal branches of the neighbouring 2 to 3 intercostal nerves are more prone. Involvement of the anterior horn of the nerve root may cause muscular atophy. The ophthalmic branch of the trigeminal nerve is most likely to be affected. Infection of the geniculate nucleus causes vesicles on the external ear, ipsilateral facial palsy, taste dysfunction (i.e. Ramsay-Hunt syndrome). It is commonly misdiagnosed as Bell's palsy.

Chinese Medicine Syndrome Differentiation

Chinese medicine (CM) diagnosis is based on the CM trade standard of People's Republic of China. In the CM syndrome Diagnosis and Curative Standard (ZY/T 001.8-94), (12) She Chuan Chuang (蛇串疮), HZ, is said to be caused by damp-heat of the Liver (Gan) and the Spleen (Pi) together with toxin invasion. It is a skin disease in which the vesicles are grouped together on unilateral side of the body, in a snake-like shape, causing severe pain.

- Stagnant heat in the Liver meridian: fresh red skin lesion, tight vesicular wall, burning or pricking pain, bitter taste in mouth and dry throat, irritability, dry stools, yellow urine, red tongue, thin or thick yellow tongue coating, string-taut, rolling and rapid pulse.
- Spleen deficiency with damp retention: skin lesion light in colour, loose vesicular walls, no thirst, abdominal distension, poor appetite, occasionally loose stools, pale tongue, white or white greasy tongue coating, deep retarded or rolling pulse.
- Qi stagnation and blood stasis: persistent local pain after disappearance of vesicles, dark tongue,

white tongue coating, string-taut and thready pulse.

MANAGEMENT

The objectives of treating HZ are to control acute pain, accelerate rash healing, minimize complications and reduce the risk of PHN and other late-appearing aequelae.⁽¹¹⁾

Treatment Principles of Acupuncture

The treatment principle of acupuncture is to treat according to the phases of HZ. (13-16) For the prodromal phase, early intervention is applied to control its progression. For the vesicular phase, the treatment is to relieve pain and control vesicles as well as to prevent PHN. For the encrustation phase, it is to clear the crust and enhance lesion healing to prevent PHN. For PHN phase, the aim is to remove obstruction of collaterals and relieve pain.

Point Selection

According to the affected area: commonly affected areas are thorax, lower abdomen, lower back, craniofacial area and four limbs. Therefore, points should be chosen from the affected areas. Grade A, level I b^{A} ;(17) (I $b^{B(18)}$).

- Ashi points: Painful spots and vesicular areas can be used for treatment directly. They are described as "where is the pain where is the point for treatment" in *Miraculous Pivot* (Ling Shu). The effect of these points is superior to that of meridian points. Grade A, level I b^A;(19)(I b^{B(20)}).
- Huatuojiaji points: VZV incubates in the spinal nerve roots or cranial nerves which later flare up as HZ and the painful area is related to the cutaneous distribution of the affected nerve. Acupuncture treatment should be targeted at the distribution areas of affected nerves. The corresponding Huatuojiaji points are good to choose. Grade A, level I b^{A,(16)} (I b^{B,(21)} II (²²⁾).

Acupuncture Techniques

Acupuncture functions immediately in painrelieving, shortening the HZ duration and lowering the incidence of PHN.

 Bloodletting with cupping: It is suitable for patients with neuralgia and skin lesion of red spots and small vesicles. Systematic review has shown that bloodletting with cupping is more effective than other acupuncture methods. (23,24) Most of the trials are based on electro-acupuncture or fire needle in combination with bloodletting cupping.

- Moxibustion: It is suitable for patients with large vesicles. Moxibustion acts to clear heat and remove toxin by dispelling heat evil out of the body. Moxibustion is effective in quickening skin lesion healing^(20,25) and stopping pain, commonly combined with other acupuncture techniques.
- Course of treatment: Daily acupuncture treatment is recommended during the vesicular phase. Each course consists of 5 to 10 treatments with an interval of 2 days between two courses. The treatment frequency should be adjusted according to the blister and pain-relieving of the patient. Many trials have reported some patients recovered after 3 to 5 treatments. Daily treatment or every other day is recommended for cases in PHN phase, 10 times as one course, 2 to 4 weeks in succession.

Intervention Opportunity of Acupuncture

A trial conducted in 2002 shows that early intervention shortens the disease course obviously, relieves nerve pain, and decreases the incidence of PHN. However, there is no proven advantage of early intervention in the encrustation phase. Early intervention of acupuncture treatment is recommended to HZ patients. Grade B, level II; (27-29) (Experience of famous veteran doctors of CM).

Main Outcome Measures

To evaluate the effect of treatment for HZ, McGill pain scale, visual analogue scale (VAS), response to analgesia (e.g. onset time for pain relief, time required for pain resolution) and incidence of PHN are the outcome measures for pain, while for skin lesion, vesicle control time, encrustation time and lesion healing time could be used.

Neither the Standard of Diagnosis and Therapeutic Effect nor the Standard of Clinical Diagnosis (ZY/T 001.8 94)⁽¹²⁾ and improvement of diseases is suitable for evaluation of acupuncture treatment for HZ. And the self-made standard is not suggested for the evaluation of therapeutic effect either.

Recommendation

Prodromal Phase

Although the early intervention has been repeatedly

mentioned in numerous reports, (26) it is difficult to make a diagnosis in the absence of vesicles during this phase. As a result, the intensity of evidence is low. Bloodletting with pyonex tapping and cupping has been proven by the limited evidence of clinical studies to be effective in controlling the development of HZ. (14,30)

Treatment Method

- Point selection: Ashi points in the area with abnormal sensation.
- Bloodletting with pyonex tapping: Disinfect the treating area routinely, tap lightly with pyonex till little bleeding. Refer to the treatment in vesicular phase.
- Cupping: Apply flash cupping over the tapped area. Refer to the treatment in vesicular phase.

Course of Treatment

Patient was treated once a day. Some patients were cured after 3–5 treatments.

Points for Attention

Refer to the points for attention in the treatment for vesicular phase with pyonex.

- After the pain is completely stopped, it is suggested to continue 2–3 treatments for consolidating the effect to prevent recurrence of pain.
- Patients are asked not to eat spicy foods during treatment period.

For patients with severe pain during prodromal phase, it is suggested to use bloodletting with pyonex tapping and cupping.

Grade C, level ∭(14,31)

Vesicular Phase

There are many methods of treatment recorded in literature on HZ, including bloodletting cupping to activate blood, remove blood stasis from meridians, and eliminate toxins; pyonex tapping to release the exterior and clear heat; fire needling to promote growth of muscle to shrink sores; and moxibustion to warm meridians, eliminate fire and relieve pain. The safety and effectiveness of acupuncture for HZ, especially in shortening the period of encrustation, (9,15) pain relief (25,32) and lowing incidence of PHN, (19,32) meanwhile, improving the patients' quality of life. (33)

have been proven by massive clinical studies.

Unfortunately, there are at present no high quality comparative studies on the outcomes of the different methods of acupuncture treatment.

Bloodletting Cupping

In order to let go of the stagnant blood, bloodletting cupping is done with a three edged needle (or plum-blossom needle) and a cup. Cupping is used after needling at the same point to promote bleeding.

The studies proved that the bloodletting cupping for vesicular phase of HZ can shorten the time of drying of vesicles, quicken the pain relief and disappearance of neuralgia, thus promote the cure, 15 and decrease the incidence of PHN. 162,34 In comparison, the treatment of acupuncture with pyonex tapping is low in cost than medication. 1635

Treatment Method

- Point selection: Ashi points: (21,24,36,37) vesicles on the trunk should be treated with the corresponding Huatuojiaji points. And vesicles on the head and facial region should be treated with Dazhui (DU14). (21,27,38)
- Bloodletting with three-edged needle: apply routine disinfection on the treatment area. Pinch the affected painful skin firmly with the thumb, index and middle fingers of the left hand; hold the needle with the right hand. Prick the lesion to a depth of 1–2 mm (0.5 fen) and with a distance about 25 mm (1 cun) from each pricked area to cause bleeding. (15,39) The larger vesicles should be punctured to release the fluid.
- Bloodletting with pyonex: Apply routine disinfection on the treatment area. Start tapping with even strength from the starting part of vesicles to the ending part of lesion till a little bleeding is achieved. (32,36) Dazhui and Huatuojiaji points may be tapped heavily 6–10 times to cause a little bleeding.

Tapping is given by even strength of the wrist and even speed of up and down vertically. The intensity depends on the constitution, HZ duration, affected area, and psychological endurance of the patient. (40)

• Cupping: Flash cupping follows the pricking with three-edged needle, after which the fixed cupping

is given with the cups retained for 5–10 min. The size and number of cups vary according to the size of the area to be treated. The bloodletting should be 3–5 mL each treatment. With dark purple marks left by cupping on skin, the effect will be better.⁽⁴¹⁾

After removing the cups, clean up the exudates and blood with sterilized dry cotton balls, and leave the area to dry naturally. Alternatively, mild moxibustion (38) or TDP lamp radiation for 20 min (34) may be used on the affected area. For patients with large and painful skin lesions, apply moxibustion once again before bedtime to hasten encrustation to relieve pain. (42) Should there be itching, do not scratch because it will subside in a few days. If some new vesicles appear, leave them for self absorption; if the vesicles are big, prick with a sterilized needle to release the fluid and apply iodine for preventing from infection.

Course of Treatment

Treatment is once everyday or every other day, 6 to 10 treatments per course. (41) Onset of pain relief starts after 3 to 5 treatments in some patients; and when crust forms, treatment could be stopped.

Points for Attention

- Cupping and bloodletting should be used with great care for those with infection or purulence in the local area or large vesicules. (41,43)
- Caution should be exercised when treating facial, peri-oral, peri-orbital lesions. (40)
- Aseptic manipulation is a must. The treating area should be kept clean and dry. Be sure no scratching for the sake of preventing secondary infection. (40,42,44,45)
- Use the individual pyonex to prevent cross-infection. (38)

Patients with neuralgia during the vesicular phase with red spots, papules or small vesicles are recommended to undergo bloodletting of Ashi points with cupping. For vesicles on the head and facial region, Dazhui (DU14) should be combined. And for those on the trunk, the corresponding Huatuojiaji points should be added.

Grade A, level $~I~a;^{(24)}~(~I~b^{\text{A}},^{(15,36)}~I~b^{\text{B}},^{(18,21,45,46)}~II^{~(32,34,37)})$

Fire Needling

Fire needling is to burn the needle on fire and

prick the selected point for the purpose to warm the meridians to dispel pathogenic factors. The effect of which in shortening the pain period, healing of lesion⁽⁴⁷⁾ and lowering the incidence of PHN has been well proved by clinical researches.⁽¹⁹⁾

Treatment Method

- Point selection: Ashi point between vesicles. (46,48,49)
- Fire needle: The patient is in a comfortable position with the affected areas exposed. After routine disinfection on the treatment area, hold the ignited alcohol lamp with the left hand, hold the needle with the right hand, burn the needle body and tip at the upper 1/3 of the flame till it becomes red, and prick quickly to a depth of subcutaneous level. The big vesicles broken by pricking should be cleaned with dry sterilized cottons balls and applied with iodine. (39,49)
- Use of fire needling in combination with other methods: Skin lesions with small vesicles or only red spots should be treated with fire needling and cupping. (39,50,51) Cups can be retained for 5–10 min. Those vesicles appeared after cupping should be broken by fire needling again to release the fluid. The pricked areas should be disinfected and kept away from water for preventing from infection.

For large vesicles, (52,53) moxibustion is applied after fire needling once daily for 20 min.

Routine acupuncture⁽⁵⁴⁾ can be combined with fire needling.

Course of Treatment

Treat once a day, 10 times as one course, or adjust accordingly.

Points for Attention

- Fire needling should be applied with great care for the areas of face, near large blood vessels, nerve trunk, and important organs. (49)
- No cupping is carried out on the face or area with large vesicules. (41,43)
- Aseptic manipulation is always important. The treated area should be kept clean and dry. Scratching is forbidden in order to prevent from secondary infection. (39)

• Be careful not to spatter patient with alcohol when performing fire needle.

Fire needling on Ashi points is recommended for the vesicular phase of HZ. For the skin lesion with small vesicles and neuralgia, fire needling plus cupping is the recommendation, while the big vesicles should be treated by fire needling plus moxibustion.

Grade A, level $[] b^{A;(19,39,47,70,52,54)} ([] b^{B(48,51)}, []]^{(49,53)})$

Moxibustion

Moxibustion is proved to be able to improve the immunity of patients, ⁽⁵⁵⁾ and also prolong the pain relief. It is especially good for drying the vesicles and stopping pain of HZ patients. At the same time, the incidence of PHN is lowered. ⁽²⁵⁾ This therapy is especially suitable for the skin lesions with large vesicles.

Manipulation

- \bullet Point selection: Ashi point on the vesicles. $^{(20,25,56-58)}$
- Moxibustion: Ignite one end of the moxa stick and hold it to the treated area with a distance of 2–3 cm from the skin to perform hanging moxibustion till the skin becomes red^(25,58) for about 15–20 min.

When affected area is large, swinging the moxa stick for covering the whole treatment area, each part of the which should be warmed but without burning sensation for 3–5 min.^(20,25)

The big vesicles should be broken first with disinfection. For the area with much exudate, 2–3 moxa sticks may be required for stronger moxibustion for about 15–20 min till the skin becomes red. (20,27)

- Stimulation quantity of moxibustion: It depends. For the big lesions in rich muscular areas and the patients with strong constitution, the duration of moxibustion treatment can be longer. (20,56)
- Order of moxibustion: Upper part first, then lower part; back first, then abdomen; scattered vesicles first, then condensed areas. (56,57)
- Course of treatment: Apply moxibustion once daily, 10 days as one course, or adjust accordingly.

Points for Attention

- Great care should be taken for moxibustion on pregnant women and those with loss of sensation. (57)
- The distance to the skin and the duration of moxibustion should be well mastered to avoid burning injury. (25)

HZ patients in the vesicular phase are recommended to be treated on Ashi points with moxibustion, especially for the skin lesion of large vesicules.

Grade B, level $\text{I b}^{\text{B};(20,25)}$ ($\text{II ,}^{(56,57)}$ $\text{III}^{(58)}$)

Surround Puncturing Combined with Electro-Acupuncture

This is a method for which the lesion is punctured with many needles at its surrounding. It is usually combined with electro-acupuncture, moxibustion, or bloodletting cupping. The researches reveal that the surround puncturing with combination of electro-acupuncture is excellent in pain control (59) and shortens the painful duration and vesicular absorption time (59,60) with low cost, (61) which decreases by 97.69% compared with that of modern medicine medication. (61)

Treatment Method

- Point selection: Ashi points of the vesicles.
- Surround puncturing: Routine disinfection. Needles are 40 mm (or 1.5 cun) in length. Insert the needles 0.5 cm from the edge of lesion horizontally with an angle of 15° towards the centre of the lesion. (60) The number of needles used depends on how big the affected area is. (60,62) The distance between two needles is about 25–30 mm (or 1–1.2 cun). After insertion, lift and thrust the needle with a reducing method and retain the needle for 30 min after arrival of gi.
- Electro-acupuncture: the electric stimulator is connected with two to three pairs of the needles, using dense-dispersed mode. (59,60) The frequency and intensity should be endurable. (59,60,61,63) Moxibustion is combined in the treatment for patients with large vesicles. (64,65)

Course of Treatment

Treat the patient once daily, 10 times as one course; ⁽⁶²⁾ or adjust accordingly.

Points for Attention

When surround puncturing is performed on the chest and hypochondrium, attention should be paid on needling direction in order to avoid producing pneumothorax. Needles should be inserted obliquely or transversely.

HZ patients in the vesicular phase with neuralgia are recommended Ashi point surround puncturing together with electro-stimulation. For large vesicles, moxibustion should be combined as well.

Grade A, level I b^A; (59) (I b^B, (60,63,64) II (61))

Encrustation Phase

To date there has not been any clinical trials done purely on treatment of HZ during the encrustation phase. Most trials include treatment in both the vesicular and encrustation phases. The fact is that there may be vesicles on one part and simultaneously encrustation is on the other. For treatment, please refer to the acupuncture for the vesicular phase.

PHN Phase

Body acupuncture, electro-acupuncture, fire needling, bloodletting and acupoint injection enable more effective pain relief. In clinical practice, two or more methods are usually used in combination to treat PHN because it is proved to be better in effect with lower recurrence in follow-up. Huatuojiaji and Ashi points are the commonly used ones.

Fire Needling

Treatment Method

- Point selection: Ashi points; (16,66) corresponding Huatuojiaji points on the affected side.
- Manipulation: After routine disinfection, prick rapidly the affected site with the burnt fire needle several times, with a distance about 10 mm among each needle hole. Then prick quickly the corresponding Jiaji points on the affected side to a depth of 2–3 mm. Finally disinfect the needle holes and the skin again for preventing infection.

Course of Treatment

Treatment is given once every other day, 2 weeks as one course.

Points for Attention

Refer to the points for attention in fire needle

treatment of vesicular phase.

Fire needling on Ashi points is recommended for patients with PHN.

Grade A, level $[b^{A}]^{(16,66)} ([]]^{(67)}$

Surround Puncturing

Treatment Method

- Point selection: Ashi points. (68,69)
- Manipulation: after routine disinfection, insert the needles 0.5 cm away from the edge of lesion towards the centre of painful area with an angle of 15° at a distance of 25–30 mm (1–1.2 cun) from each needle. Depending on the size of affected area, generally 10 to 30 needles are used. Reducing method of small amplitude lifting-thrusting and rotating is adopted after arrival of qi. Retaining of the needles is 30 min.

Course of Treatment

Apply treatment once daily, 10 times as one course, 2 courses in succession.

Points for Attention

Refer to the points for attention in surround puncturing of vesicular phase.

HZ patients with PHN are recommended surround needling on Ashi points.

Grade B, level I bA(60)

Electro-Acupuncture on Huatuojiaji Points

Treatment Method

- Point selection: Jiaji points of the corresponding nerve segment on the affected side. (70)
- Manipulation: After routine disinfection, the 40 mm needles are inserted obliquely towards the spine to a depth of 25–30 mm. Upon arrival of qi, even reinforcing-reducing method is adopted. Retaining of the needles is 30 min.
- Electro-stimulation: the disperse-dense wave (71,72) with an endurable intensity for 30 min is the adopted.

Course of Treatment

Treat once daily, 10 days as one course, 2 courses in succession.

Points for Attention

• Patients who have pace-maker are contraindicated for electro-acupuncture.

HZ patients in the phase of PHN are recommended to use Jiaji points. Electro-acupuncture is suggested for the radiating pain and hyperaesthesia.

Grade B, level $[b^{B};^{(70,72)} (]]^{(73)}$

Bloodletting and Cupping

Treatment Method

- Point selection: Ashi points on the painful area, (74,75) and the corresponding Jiajji points of the affected side.
- Bloodletting and cupping: After disinfection, prick 1–3 times with a three-edged needle, and press to have a little bleeding, or tap with a plum-blossom hammer with a medium strength till a little bleeding. (76) Then do flash cupping for 5–10 min for bloodletting 2–5 mL.
- Post-cupping care: Refer to the bloodletting cupping treatment of vesicular phase.

Course of Treatment

Give treatment once daily, 10 days as one course, 2 courses in succession.

Points for Attention

Refer to points for attention of the bloodletting cupping for vesicular phase.

Bloodletting and cupping on Ashi points is recommended for HZ patients in the PHN phase.

Grade B, level $I b^{B}$; (74) (II (75))

Adverse Reactions

Of clinical trials, there are very few records of adverse reactions of acupuncture for HZ. However, there may be pain or fainting during acupuncture. If any, it should be managed strictly according to the clinical manipulation. (30,77,78) The records are as follows.

Fire Needle

One trial⁽¹⁹⁾ reported 1 case of post-treatment headache, 1 case of fatigue, and 2 cases of mild leukopenia.

Bloodletting

In 1 trial, (77) 1 patient experienced unbearable pain, mild dizziness, chest discomfort (relieved after lying down for 5–10 min) when treated by pricking with three-edged needle. In another trial, (79) bearable pain during bloodletting was reported but without any other adverse reactions. It was also reported that 2 patients had fainting from acupuncture as a result of weakness due to old age but without any other adverse reactions. (30)

Bloodletting with Pyonex (Plum-Blossom Hammer) Tapping and Cupping

Some patients experienced bearable pain during tapping with pyonex. All patients had cup bruise after cupping, but recovered fully in follow-up. (78)

Contraindications

- Haemophiliacs and those patients with bleeding tendencies should not be treated by fire needle, pyonex tapping or bloodletting cupping. (39,40)
- Patients with large vesicles or severe skin infection should not be treated with bloodletting cupping. The areas around the month, eye, axillary and hairy regions, perineum should not be treated with bloodletting cupping. (40,43) Fire needling should not be used around the eye or inside the ear canal.
- Patients with nerve ending impairment should have moxibustion carefully. Pregnant women should not be treated with acupuncture and moxibustion. (556)
- Fire needling and bloodletting can not be used in areas near large blood vessels and vital organs, if necessary, use with great caution. (39)

Points for Attention

Disinfection and Isolation

- Pay attention to aseptic manipulation, keep the surface of wound clean and dry, avoid scratching to prevent secondary infection.⁽⁴¹⁾
- Use 75% alcohol or iodine to disinfect the skin of treatment area.
- Use the individual pyonex to prevent cross-infection. (38)

Precautions

- In fire needling and cupping, avoid careless dripping of alcohol on patients which will cause burns.⁽³⁹⁾
 - Oblique or transverse insertion near the

vertebral column or on the chest wall should be performed to prevent pneumothorax. (80)

• Proper duration of moxibustion is to do it till the skin becomes reddish, avoid causing burns. (42)

Self-Care of the Patient

- Keep the surface of wound dry and clean, let the crusts fall off naturally, change the underwear everyday.⁽⁴⁰⁾
- Do not take bath after acupuncture on the day to avoid contamination of needle-holes. (39)
- Eat easily digested food; keep relaxed and optimistic mentality; follow a regulated lifestyle. (39,41)
- Avoid contacting with children and pregnant women.⁽⁴¹⁾

Outcome

Quality of life, (4) direct and indirect medical expenses could be used for evaluation. (35,61)

METHODS

Because of the limit of the layout, the methodology of guideline development is omitted here. The search strategy, level of evidence, grading of recommendation, reviewing and consultation process, as well as guideline updating might refer to the relevant literatures. (81-85)

Aknowledgement

We thank TIAN Cong-huo, LIU Wa-li, WANG Linpeng, ZHAO Ji-ping, WANG Li-ping, YANG Guang, WANG Yin, HUANG Shi-xi, HU Jing-qing and WANG Ying-hui for the development of this guideline.

REFERENCES

- Sampathkumar P, Drage LA, Martin DP. Herpes zoster (shingles) and postherpetic neuralgia. Mayo Clin Proc 2009;84:274-280.
- Schmader KE, Dworkin RH. Natural history and treatment of herpes zoster. Pain 2008;9:3-9.
- Han JN, Liu FQ. UVA irradiation for postherpetic neuralgia.
 Chin Magage Clin Med Prof Res (Chin) 2007;13:3220.
- McElhaney JE. Herpes zoster: a common disease that can have a devastating impact on patients' quality of life. Vaccines 2010; 9:27-30.
- Whintley RJ, Volpi A, Mckendrick M, Wijck A, Oaklander AL. Management of herpes zoster and post-herpetic neuralgia now and in the future. J Clin Virol 2010;48:S20-S28.
- 6. Wilson JF. Herpes zoster. Ann Intern Med 2011;154(5): ITC31-15.
- Stankus SJ, Dlugopolski M, Oacker D. Management of herpes zoster (shingles) and postherpetic neuralgia. Am Fam Physic 2000;8: 2437-2444.
- Zhang LS, Liu XL, eds. Modern pain study. 1st ed. Shijiazhuang: Hebei Science and Technology Publishing House;1999:539.

- Max MB, Schafer SC, Culnane M, Dubner R, Gracely RH. Association of pain relief with drug side effects in postherpetic neuralgia: a single-dose study of clonidine, codeine, ibuprofen, and placebo. Clin Pharmacol Ther 1988;43:363-371.
- Baron R, Saguer M. Postherpetic neuralgia: are C-nociceptors involved in signalling and maintenance of tactile allodynia? Brain 1993;116:1477-1496.
- Christopher H, Chilvers ER, John AA, eds. Davidson's principle and practice of medicine. 18th ed. Edinburgh: Science Publishing House;2000.
- ZY/T 001.8 94 Criteria of diagnosis and therapeutic effect of skin diseases and syndromes in traditional Chinese medicine.
 Beijing: State Administration of Traditional Chinese Medicine of the People's Republic of China;1994.
- Ni SN. Herpes zoster of 300 cases treated by stages. Jilin J Tradit Chin Med (Chin) 1997;17:9-10.
- Lei H. Treatment of 60 cases of herpes zoster latency. J Clin Acupunct Moxibust (Chin) 2001;17:29-30.
- Xu L, Yang XJ. Therapeutic effect of aciclovir in combination with callateral-puncturing and cupping in the treatment of 40 cases of herpes zoster. Tianjin Pharma (Chin) 2004;16:23-24.
- Wang J. Clinical research on fire needling in the treatment of 34 cases of postherpetic neuralgia of blood stasis type. J Clin Acupunct Moxibust (Chin) 2007;23:9-12.
- Qin XZ. Efficacy observation on postherpetic neuralgia treated by Ashi point injection. Acta Med Sin (Chin) 2006:19:1169-1171.
- Song YG, Zhao JC, Yuan H. Observation on therapeutic effect of pricking blood and cupping on herpes zoster on the head and neck. China Acupunct Moxibust (Chin) 2004;24:624-626.
- Nie B. Clinical efficacy evaluation on herpes zoster treated by half-puncture of fire needle pricking. J Jiangxi Coll Tradit Chin Med (Chin) 2006;18:38-39.
- Zhang EH. Treatment of 30 cases of herpes zoster with moxibustion. J Nangjing Univ Tradit Chin Med (Chin) 2004;20:369-370.
- Hong J. Clinical observation on 54 cases of postherpetic neuralgia treated by blood-letting. Jiangsu J Tradit Chin Med (Chin) 2004;22:45.
- Hu RY. Herpes zoster in costal region treated by acupoint injection. New J Tradit Chin Med (Chin) 1994;26:30-31.
- Sa YP. Clinical observation on herpes zoster treated by plumblossom needle, cupping and TDP. Hebei J Tradit Chin Med (Chin) 2003:25:442-443.
- Zhao T. Systematic assessment of randomized controlled trials of acupuncture-moxibustion treatment of herpes zoster. Shanghai J Acupunct Moxibust (Chin) 2007;26:30-33.
- Xu SF. Prevention of postherpetic neuralgia by means of moxibustion and acyclovir. Hubei J Tradit Chin Med (Chin) 2006;28:33.
- 26. Tong M. Time selection of herpes zoster treated by acupuncture and moxibustion. Acta Acad Med Neimongol (Chin) 2002;24:195-196.
- Tian CH, ed. Clinical experience of Tian Cong-huo. 1st ed. Beijing: China Press of Traditional Chinese Medicine;2005:169-174.
- Huang QF, ed. Acupuncture-moxibustion collection of selected specimens of famous professionals. 1st ed. Shanghai: Shanghai University of Traditional Chinese Medicine Press;2011:21-25.

- He PR, ed. Operation illustrations of acupuncture-moxibustion three removing obstruction methods. 1st ed. Beijing: Scientific and Technical Documents Publishing House;2006:114-115.
- Fan YW. Efficacy observation on minimally invasive acupuncture plus Meng's cupping in the treatment of herpes zoster in old patients. J Emerg Tradit Chin Med (Chin) 2006;15:43.
- Jiao Y, Li JH. Sciatica with herpes zoster treated by callateralpuncturing and cupping. J Clin Acupunct Moxibust (Chin) 2000;16:30-31.
- Liu L, Li ZL. Efficacy observation on herpes zoster treated by integrated traditional Chinese and Western medicine. Pract Clin J Integr Tradit Chin West Med (Chin) 2003;16:2088-2089.
- Xie JH. The quality of life of post herpes zoster neuralgia. J Clin Rehabil Tissue Eng Res (Chin) 2003;7:3610-3611.
- Duan YQ. Treating 37 cases of herpes zoster with venesection cupping and TDP irradiation. J Yunnan Coll Tradit Chin Med (Chin) 2006;29:38-39.
- Liu XL, Zhang LC, Fan CE, Yang GD, Li XT. Herpes zoster treated by plum-blossom needle and procaine. Clin J Med Offic (Chin) 2005;33:302.
- Li HH, Wang YH. Postherpetic neuralgia treated by direct fire moxibustion. Shanghai J Acupunct Moxibust (Chin) 2004;23:36.
- Zheng T. Callateral-puncturing, cupping and TDP in the treatment of 85 cases of herpes zoster. Jilin J Tradit Chin Med (Chin) 2003;23:44.
- Liu CM. Herpes zoster of 25 cases treated by moxibustion of dengcao. Shanghai J Acupunct Moxibust (Chin) 2004;23:11.
- Wang YH, Huang SX, Liu BY, Guo YF, Ding X, Liu WL, et al. General clinical evaluation of repeated shallow needling with fire needle on herpes zoster. Chin J Basic Med Tradit Chin Med (Chin) 2009;10:60-63.
- Liu DQ. Nursing experience on herpes zoster treated by plum-blossom needle. Heilongjiang J Tradit Chin Med (Chin) 2001:3:41-42.
- Pang SF. Observation on the theraputic effect of pricking blood, cupping and surround needling on herpes zoster in the plateau area. Chin Acupunct Moxibust (Chin) 2003;23:207-209.
- Liu M, Shao X, Yu SG. Efficacy observation on 65 cases of herpes zoster treated by acupuncture and moxibustion. J Clin Acupunct Moxibust (Chin) 2006;22:16-17.
- 43. Yu CY, Gu Q, Dong GH. Research on postherpetic neuralgia treated by callateral-puncturing and cupping. J Clin Rehabil Tissue Eng Res (Chin) 2002;6:875.
- Liu QW, Chang HS. Herpes zoster treated by integrated traditional Chinese and Western medicine. J Extern Ther Tradit Chin Med (Chin) 2004;13:53.
- Wang XY, Zhang JB, Xing GL. Clinical observation on 42 cases of herpes zoster treated by callateral-puncturing and cupping. J Clin Acupunct Moxibust (Chin) 2002;18:29.
- Wu ZH, ed. Modern dermatology and venereal disease study. Guangzhou: Guangdong People's Publishing House:2000:213-217.
- Tang SX, Xu ZH, Tang P, Hong HL. Clinical observation on herpes zoster treated by panlongsantou needle. Liaoning J Tradit Chin Med (Chin) 2005;32:1294-1295.
- Lin Y, Cheng XJ. Efficacy observation on 43 cases of herpes zoster treated by fire needle pricking. Fujian Med J (Chin) 2007;29:124-125.

- Zhang JC. Efficacy of fire needle for 62 cases of zona serpiginosa. Pract J Clin Med (Chin) 2007;4:64.
- Chen CT, Chen ML, Tang DS. Clinical observation on 50 cases of herpes zoster treated by fire needle pricking. Lishizhen Med Mater Med Res (Chin) 2007;18:1842-1843.
- Xiong ZL, Zhang GH. 48 cases of acute herpes zoster treated by fire needle pricking and cupping. J Clin Acupunct Moxibust (Chin) 2007:23:38-39.
- Huang SY, Wu ZL, Tang SR. Efficacy observation on herpes zoster treated by fire needling plus moxibustion and Western medicine. Beijing J Tradit Chin Med (Chin) 2006;25:243-244.
- 53. Xu HZ. Fire needling combined with moxibustion in the treatment of 45 cases of herpes zoster. J Pract Tradit Chin Med (Chin) 2003;19:487.
- Huang XM, Xue AG, Li XX, Zhang YL. Efficacy observation on acute herpes zoster treated by combination of hot needling and acupuncture. Hunan Guid J Tradit Chin Med Pharmacol (Chin) 2003;9:36-37.
- Li SQ, Zhou LY, Zeng TY. Cone-shaped moxa moxibustion treating herpes zoster and its mechanism. Acta Univ Med Tongji (Chin) 2000;29:477-479.
- Huang YL, Zeng TY. Efficacy observation and nursing on herpes zoster treated by moxibustion. J Nurs Sci (Chin) 2000;15:430-431.
- Zhang CM, LI M. Efficacy observation and nursing on herpes zoster treated by moxibustion. J Shaanxi Coll Tradit Chin Med (Chin) 2005:28:47.
- Cai R. Moxibustion therapy for 203 cases of herpes zoster.
 Shanghai J Tradit Chin Med (Chin) 1996;7:19.
- 59. Wang SL. Efficacy observation on treatment of 40 cases of herpes zoster with Wuhuqunyang needling method and medicine. New J Tradit Chin Med (Chin) 2006;38:62-63.
- Li Y. Electroacupuncture plus TDP in the treatment of 40 cases of herpes zoster. J Shandong Univ Tradit Chin Med (Chin) 2004;28:209-210.
- Liu FL, Lu ZP, Li LF. 96 cases of herpes zoster treated by acupuncture. Shanghai J Acupunct Moxibust (Chin) 2002;21:32.
- 62. Xu GL, Song BL. Therapeutic observation on the treatment of 60 cases of herpes zoster with local surrounding acupuncture. Chin Comm Doct (Chin) 2007;23:39.
- 63. Xia ZX. Treatment of 81 cases of herpes zoster with surrounding acupuncture. J Nangjing Univ Tradit Chin Med (Nat Sci, Chin) 2001;17:117.
- Yang RF. Therapeutic effect observation on the treatment of 60 case of zona with round acupuncture and moxibustion. Guid J Tradit Chin Med (Chin) 2005;11:51-52.
- Li XL, Zhang J, Chang H. 56 cases of herpes zoster treated by acupuncture and moxibustion. Hebei J Integr Tradit Chin West Med (Chin) 1999;8:951-952.
- Wang J, Li DM, Zhao JP. Treatment of 28 cases of postherpetic neuralgia of blood stagnation type with fire needle pricking. China Naturopathy (Chin) 2006;14(2):22-23.
- Gao ZH, Zhou LL. Treatment of 58 cases of postherpetic neuralgia with fire needle pricking. J Liaoning Coll Tradit Med (Chin) 2001;3:129.
- Zhu MF, Kuang L, OuYang H, Yang ZB, Wang C. Clinical observation on 126 cases of postherpetic neuralgia treated by surrouding acupuncture. J Hunan Coll Tradit Chin Med (Chin)

- 2006;26:52-53.
- Zhu TB. Therapeutic effect of acupuncture on postherpetic neuralgia. Hebei J Tradit Chin Med (Chin) 2004;26:364-365.
- Tan QW. Observation on therapeutic effect of acupuncture at Huatuo Jiaji points (EX-B2) on herpes zoster residual neuralgia. Chin Acupunct Moxibust (Chin) 2004;24:537-538.
- Peng JM, Huang WF, Zeng SP. Clinical observation on postherpetic neuralgia treated by acupuncture combined with aciclovir. Hainan Med J (Chin) 2002;13:21.
- Shi YC. Treatment of 31 cases of postherpetic neuralgia with electroacupuncture. J Clin Acupunct Moxibust (Chin) 2007:23:27-28.
- Zhou L, Zhang HX. Clinical observation of the treatment of electro-acupuncture Jiaji acupoint on 66 cases of postherpetic neuralgia. J Clin Acupunct Moxibust (Chin) 2006;22:21-22.
- Lin FY. Postherpetic neuralgia treated by plum-blossom needle.
 Chin J Pract Chin Modern Med (Chin) 2005;18:516.
- Lei ZJ, Li F, Chen CF, Lian N. Randomed controlled efficacy observation on plum-blossom needle stabbing plus cupping in the treatment of postherpetic neuralgia. Modern Rehabilit (Chin) 2001;5:131
- Cao CM. Efficacy observation on postherpetic neuralgia treated by combination of traditional Chinese medicine and Western medicine. Chin J Pract Chin Modern Med (Chin) 2004:17:3077-3078.
- Li XS, Long B, Kuang L, Luo L. Clinical observation on the treatment of 30 cases of acute posterior ganglionitis remained neuralgia with acupuncture and ventouse. Guid J Tradit Chin Med (Chin) 2005;11:35-36.
- 78. Liang GZ, Ban C, Quan XJ. Efficacy observation on herpes zoster synthetically treated by plum-blossom needle stabbing and cupping. China Leprosy J (Chin) 2006;22:7.
- Zhang YH. Clinical observation on 120 cases of herpes zoster treated by Chinese medicine plus blood-letting. Chin J Dermatovenereol Integr Tradit West Med (Chin) 2006;5:46-47.
- Yang JS, ed. Study on acupuncture and moxibustion. 1st ed. Beijing: People's Medical Publishing House;1989:465.
- China Academy of Chinese Medical Sciences, China Association of Acupuncture-Moxibusiton. Evidence-based guidelines of clinical practice in Chinese medicine acupuncture. 1st ed. Beijing: China Press of Traditional Chinese Medicine;2011:5-15.
- Liu ZS, Peng WN, Mao M Deng YH, Wang J, Liu BY. Literature evaluation standard of evidence-base acupuncture clinical practice guidelines. Chin Acupunt Moxibust (Chin) 2009;29:81-83.
- 83. Zi MJ, Wu X, Liu BY, Zhao H, Liu ZS, Zhao JP. Characteristics of the guidelines of acupuncture clinical practices. Chin Acupunct Moxibust (Chin) 2010;30:1038-1040.
- 84. Wu X, Zi MJ, Liu BY, Liang FR, Zhao H, Liu ZS. "Acupuncture Clinical Practice Guidelines" character and the development of principles and methods. Guid J Tradit Chin Med Pharm (Chin) 2010:16:1-4.
- 85. Guo X, Liu BY, Liu ZS, Zhao H. Discussing the characteristics of structure and methodology in the evidence-based guidelines of acupuncture for clinical practice. J Evid-Based Med (Chin) 2008:8:104-108.

(Received May 7, 2012) Edited by WANG Wei-xia