Teaching Roundtable

Acupuncture Treatment of Heel Pain

HU Jin-sheng 胡金生
Institute of Acupuncture and Moxibustion, China Academy of Chinese Medical Sciences, Beijing 100700, China

CASE HISTORY
A female patient, 46 years old, an officer from Hong Kong, paid her first visit on September 18, 2007, with the chief complaint of pain in both heels, especially the left one, for 3 weeks, with unknown reason. She stated that the pain would occur in the morning upon getting up when the foot stepped on the ground. It would get worse while walking and became severe when walking long. Owing to the big mental pressure in her work and daily life, she often felt weak. She also had poor memory, dream-disturbed sleep, occasional lumbar soreness, and slight pain in knee joints while climbing up the stairs. Her appetite was good, and feces and urine were normal.

Physical examination at the moment showed that the patient had a slightly thin body figure, quick response, and medium nutrition. The X-ray examination showed slight hyperostoeogeny of both calcaneuses. The blood pressure was 126 / 76 mmHg and the heart rate 82 beats/min. The heart rhythm was normal, with no murmur. No edema was found in both lower limbs. There showed obvious tenderness in both soles and slight tenderness on both sides of the sole. The TCM examination found that the patient was in good mental status and had a sallow complexion, a slim-small tongue, red in proper with little coating, and deep thready pulse.

DISCUSSION
Prof. HU: Would you please give your TCM differentiation based on the patient’s clinical manifestations?

Dr. ZHANG: This case of heel pain is due to kidney deficiency. The kidney and heart are the two organs mainly affected. The symptoms of lumbar soreness and knee joint pain are the signs of kidney deficiency, while dream-disturbed sleep, slim-small tongue and little coating are the characteristics of deficiency of heart-yin and blood.

Dr. LI: I agree to Dr. ZHANG’s analysis. The pathogenic change of this patient affected two zang-fu organs, kidney and heart. The big mental pressure in her work affected the function of heart in storing the mind. The big pressure and excessive anxiety consumed the heart blood, causing deficiency of heart blood and impaired nourishment of the heart. Restlessness of the mind resulted in dream-disturbed sleep. Moreover, prolonged illness would affect the kidney, leading to deficiency of kidney water, hence the occurrence of heel pain. This is a deficiency syndrome.

Dr. WANG: I agree to the analyses of my two colleagues. Based on the differentiation of clinical symptoms, we can take problems of the kidney and heart into consideration. However, I am still not so clear about how the pain in heel is connected with the kidney. Prof. HU, would you explain it to us?

Prof. HU: You have made analyses by properly combining the theory you’ve learned about the physiological functions and the pathological changes of the zang-fu organs with the patient’s clinical manifestations. This shows that you have already had certain knowledge about heel pain.

In TCM, pain in heel is related with the kidney. We can understand it from the following three aspects.
1. The kidney has the function of dominating the bone and producing marrow. The heel belongs to the bone, and the pathologic change of bone can then be
related with the function of kidney in dominating the bone.

2. The channel of kidney passes curved around the heel and enters the sole of foot. Therefore, based on the relationship between channels and zang-fu organs, pain in heel can also be related with the kidney.

3. The patient has lumbar soreness, lassitude and deficiency in energy. This manifestation of kidney deficiency can be regarded as the evidence for differentiation as well.

Heel pain of this patient is mainly due to kidney deficiency and dysfunction of kidney in dominating the bone, the bone marrow is lack of enough nourishment from kidney essence, thus the heel pain is present. Besides, the patient also has the symptoms of heart blood deficiency. So we can think that this pathological change mainly affects two zang-fu organs, kidney and heart. As far as the causative factors are concerned, the big pressure in work and over-thinking first consume the heart blood, then affect the mind stored in the heart. Impaired nourishment of the heart brought about dream-disturbed sleep. Prolonged illness results in kidney deficiency and poor nourishment of bone gives pain to heel. Do you have any other questions?

Dr. LI: Treated by acupuncture? The heel pain due to calcaneal spur (hyperosteogeny) can be treated by acupuncture?

Prof. HU: Yes, it is. Acupuncture has a good effect for it. Clinical observations find that acupuncture has also a very good analgesic effect on calcaneus hyperosteogeny. Comparison of X-ray examinations before and after acupuncture treatment shows that acupuncture seems to have a certain effect on the spur, making the hyperosteogeny of some patients decrease to a certain degree.

Now, please give your opinion on the treatment principle and point selection.

Dr. ZHANG: Since the pathological condition of this patient is of kidney deficiency, I think the treatment principle should be nourishing the kidney and tranquillizing by calming the heart.

Point selection: Zusanli (ST 36), Sanyinjiao (SP 6), Taixi (KI 3), Shenmen (HT 7), Neiguan (PC 6).

Analysis: Shenmen (HT 7) is selected for clearing the heart fire to calm the mind, Neiguan (PC 6) for soothing the heart to strengthen the effect of tranquilization, Taixi (KI 3) for tonifying the kidney to replenish essence, and Zusanli (ST 36) and Sanyinjiao (SP 6) for regulating the spleen and stomach to reinforce vital-qi to promote the production of qi and blood. They are all benefiting the heart and kidney. Reinforcing method should be adopted.

Dr. LI: I agree with Dr. ZHANG. Can we add Ashi points to strengthen the analgesic effect?

Dr. WANG: I agree with the two doctors. I have the same question that how to apply Ashi points.

Prof. Hu: The treatment principle and point selection you gave are all correct. Baihui (GV 20), Shenting (GV 24), Yintang (EX-HN3) can be added to strengthen the tranquilization effect. The adding of Ashi points suggested by Dr. LI and Dr. WANG is very important, especially in the treatment of pain in heel.

Clinically, points selected according to the tender spots are called ‘Ashi points’. It is said in the 19th chapter of Qianjin Yaofang (千金要方 Invaluable Prescriptions) by SUN Si-miao that “Moxibustion was often applied by Wu Shu people. When they had pain, the painful area was just treated no matter what point was located there, and the pain was quickly relieved. It was called ‘Ashi point’. Acupuncture and moxibustion were all working well on it.” This method of point selection is what mentioned in Huangdi Neijing (黄帝内经 The Yellow Emperor's Internal Classic) as ‘selecting points on tender spots’. As a matter of fact, in selecting channel points or extra points, attention should also be paid to the sensitive reactions. When tender spots are not located on the exact place of channel points or extra points, they can be used as Ashi points. If their indications are found out, they can be developed into extra points.
Therefore, extra points are said as supplements to channel points and Ashi points as supplements to extra points.

"Where is pain where is the point." Acupuncture and moxibustion can be directly applied on the painful local areas. In clinic, the application of Ashi points can directly affect the therapeutic effects for painful syndromes. We can say that pain starts from Ashi point, no pain no Ashi point. Thus we can learn from the above the importance played by Ashi points in treating painful syndromes. In other words, the relief or disappearance of tenderness may indicate the relief of pain syndrome. Acupuncture at Ashi points is especially important for patients with painful heels.

Application: Usually 1–4 Ashi points can be selected according to the severity of pain. For the mild pain, one needle can be inserted into the middle of painful area of heel. For severe cases, three needles can be added to puncture at both sides and back respectively, altogether 4 Ashi points.

Before needling, patients need to be told that acupuncture at the heel would be very painful, making them get prepared for the pain. You should also tell them that acupuncture can treat heel pain in order to get their cooperation for the treatment.

For the knee joint pain, Heding (EX-LE2), Neixiyan (EX-LE4), Dubi (ST 35), Xuehai (SP 10), and Liangqiu (ST 34) can be added.

**TREATMENT AND RESULTS**

This patient received acupuncture with the points selected according to syndrome differentiation and Ashi points. After one session, she got slight improvement. After 5 sessions, her pain was obviously relieved. She had basically no pain in the right heel after one course of treatment and was cured after 15 sessions. Her sleep was better than before and she was cheerful. Five more sessions were given for consolidation. The heel pain was cured by 2 courses, altogether 20 treatments. She was improved in appetite. Her lumbar soreness and knee joint pain were all greatly alleviated. The follow-up 3 months later found her in good condition.

(Translated by WANG Xin-zhong 王新中)