

SPORTS / EXERCISE / FITNESS

Treating Sports Injuries and Pain

THE TENDINO-MUSCLE MERIDIANS

Whitfield Reaves, OMD, LAc; Chad Bong, MS, LAc

Treating the tendino-muscle meridians (TMM) is one of the first things to consider in treating sports injuries and pain. Their treatment is often overlooked and under-utilized. The activation of these important pathways can be crucial to effectively treating patients with acute trauma or repetitive-stress injuries.

Let's start with a description of the TMM (*jin mai, jin jing*). They are described as a channel network that circulates *qi* over the superficial aspect of the body.1 This includes the skin, the muscles, and the tendons. They travel in the "depressions and planes between muscles and tendons."2 Furthermore, the muscle meridians are comprised of *wei qi* ("protective" *qi*), which is not "contained" within a vessel. Thus, their pathways have a bit more freedom and flexibility. I suggest that the reader view the tendino-muscles meridians as a general pathway of *qi* in the muscles, fascia and tendons. They are responsible for many functional activities of the musculoskeletal system, and are therefore involved in many sprains, strains and other traumatic injuries.

The *jing*-well point is the only acupuncture point directly shared by both the primary meridian and the tendino-muscle meridian. After the *jing*-well point, the TMM follows the path of the primary meridian past the first, second and third joints of the extremity (i.e., the ankle or wrist, the knee or elbow, the hip or shoulder). Because the *wei qi* of the meridian is not contained within a vessel, its pathway is superficial, broad and diffuse.

Most texts describe the pathology of the TMM as syndromes of either excess (*shi*) or deficiency (*xu*). As you can guess, an excess syndrome of the TMM produces pain. It is usually described as diffuse and distending, and frequently found at multiple *ah shi* points in the affected muscle, fascia or tendinous areas. Most sources emphasize that pain is elicited by light palpation and pressure. Remember, the TMMs are superficial and the *qi* is not contained within a vessel. Thus the pain will not manifest as fixed, localized and deep. Other accompanying symptoms include stiffness, swelling, spasm and contraction. You may observe inflammatory signs of a *yang* nature, including heat and redness.

A typical clinical picture is the downhill skier who has been on the slopes all day long. They complain of pain, tightness and a feeling of fullness in the quadriceps muscle group; a typical ache after a good hard workout. Upon palpation, there are numerous *ah shi* points on the anterior thigh, elicited using relatively light pressure. These painful points are found in the superficial layers of the muscle, along the Stomach channel. This may be diagnosed as an acute excess condition of the tendino-muscle meridian of the Stomach. Simply bleeding St 45 (*Li Dui*), the *jing*-well point, should improve the condition significantly, possibly without any further treatment.

If, however, our ambitious skier had taken a hard fall, the quadriceps could have sustained a slight strain or tear in the muscle tissue. This case would present quite differently. Palpation would reveal

fixed pain at the site of the tear, elicited with deep pressure. While the TMM may also be involved, the primary lesion is in deeper tissues of the muscle, and *jing*-well point treatment would not be sufficient to fully heal this case. You would undoubtedly need additional points and techniques in the treatment protocol for the patient.

Bleeding is the preferred way to treat a *jing*-well point. Using sterile lancets and surgical gloves, swiftly needle-prick the point while holding firm pressure on the finger or toe. Try to get 10 large drops of blood to drain from the point. If the quantity of blood is not sufficient, a simple trick is to lower the patient's foot or arm off the table. This will often get the necessary drops of blood.

Jing-well points are treated on the same side as the site of injury. The *yang* tendino-muscle meridians are usually more responsive and clinically effective than those of the *yin* meridians. Treatment may include more than one *jing*-well point when the site of injury extends to multiple meridian pathways. Care should be taken in bleeding *yin* meridian *jing*-well points, considering all of their contra-indications.

In sports medicine acupuncture, I generally organize treatment into a systematic approach using four steps. Activation of the TMM is one of the techniques of step one. With all the techniques of this initial step, the practitioner is looking for an immediate effect on the patient. Carefully observe if there is a decrease in pain or an increase in range of motion. My experience is that up to 80 percent of patients with pain due to injury or trauma will have some degree of improvement from bleeding the indicated *jing*-well point(s). Patients with *qi* stagnation and blood stasis in the deeper tissues - conditions like a sprained ankle, shoulder tendonitis, or joint pain - will often experience a 15 to 25 percent improvement.

I recently treated a runner from a local high-school track team. He had a slight tear of the quadriceps tendon at its attachment to the ilium at the anterior superior iliac spine. Manual muscle testing of both hip flexion and knee extension reproduced pain and weakness. As this injury is likely on the TMM of the Stomach, the *jing*-well point St 45 (*Li Dui*) was treated with a bleeding technique. Other local and distal points on the Stomach meridian were also used.

Afterward, I immediately retested hip flexion and knee extension. These tests revealed both a strong muscle and significantly reduced pain at the tendinous attachment. This was the first acupuncture treatment for this young athlete, and he was amazed to see such an immediate change. Within several treatments and a week or so of rest, he was back to full training and competition.

In conclusion, don't underestimate how much improvement can be achieved by the simple technique of bleeding one or more *jing*-well points. Because it is so important in treating sports injuries and pain, the *jing*-well point is often the first technique I use to start a treatment.

References

- 1. Treatment of the Tendino-Muscle Meridians. Notes from translations of Nguyen van Nghi, MD.
- 2. Low R. *The Secondary Vessels of Acupuncture*. New York: HarperCollins, 1984, pp. 77-81.

MARCH 2010