Researchers to Study Acupuncture for Ankle Instability and Shin Splints

By Editorial Staff

Ankle sprains and shin splints are two of the most common injuries of the lower leg. A painful condition seen most frequently in athletes, shin splints result from the tearing of the musculotendinous sheath away from the bones of the lower leg and are usually caused by an increase in running mileage, a change in running surface, or the start of a new training program.

Most ankle injuries, meanwhile, are caused by an inversion sprain of the anterior talofibular and calcaneofibular ligaments, the two primary lateral stabilizing ligaments of the ankle. Because the ankle joint is quite complex, it does not always return to normal after injury; in fact, if an ankle is sprained repeatedly, the supporting musculature becomes imbalanced such that the ligaments become unstable, predisposing the ankle to even further injury.

Although ankle sprains and shin splints appear to respond well to acupuncture, it has been difficult to measure how successful the therapy has been in making patients better. To get a better understanding of the benefits acupuncture could have on each condition, a pair of studies are currently being conducted by Matthew Callison, a licensed acupuncturist, and a team of researchers at the UCSD/RIMAC Sports Training Center in San Diego, California.

Acupuncture and Ankle Sprains

The first study will look at acupuncture’s ability to affect ankle stability. To qualify for the study, subjects who had had numerous ankle sprains in the past and currently have a feeling of "weakness" in the ankle. Patients will be divided into a test group that will receive acupuncture treatment that includes motor points (areas on the skin above a neuromuscular junction) and extraordinary vessel points, and a control group that will receive no treatment.

Callison’s team will measure ankle proprioception by having participants balance on one foot on a computerized platform, which will measure the number of times and distance each participant wavers from their range of balance. After the first set of measurements, patients will receive either acupuncture or no
treatment, then be retested to measure any differences in balancing.

"Using acupuncture on motor points has a profound effect on the efficacy of treating musculoskeletal injuries," said Callison. "I want other acupuncturists to have confidence in their ability to treat these kinds of injuries."

**Acupuncture and Shin Splints**

The second study will determine the effects of acupuncture in treating shin splints. Subjects will be randomly divided into three groups. In the first group, patients will receive treatment in sports medicine modalities from qualified sports trainers. Patients in the second group will receive acupuncture treatments from Callison and a team of interns from Pacific College of Oriental Medicine. The third group will be subjected to both treatments.

Each study participant will receive an initial exam and six consecutive treatments. After the sixth treatment, pain levels will be measured using the Lykert scale subjective assessment test.

"Using the acupuncture needle and electric stimulation, we can decrease the inflammation in the immediate area," noted Callison. "Acupuncture is an important physical modality, and I hope that studies like this one will prove its value."

Results of the studies will be available later this year. For more information, contact Dr. Callison at (619) 224-6616, or by e-mail at mcallison -at- ormed.edu.