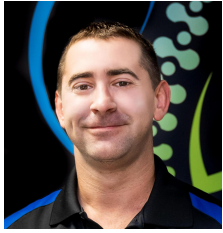


The Best Treatment for Shin Splints

By Dr. Jon DeGorter, DC



One of the most common lower leg conditions is Medial Tibial Stress Syndrome, also known as Shin Splints, characterized by a stress reaction on the inside of the shin bone. A stress reaction is the preceding stage to a stress fracture. The shinbone has a “skin” layer on it called the periosteum. Tension from the muscle puts strain on the bone surface creating, resulting in the periosteum being pulled away from the bone. A stress fracture develops gradually, as stresses progressively overcome the bone’s ability to heal itself. The lower leg muscles also develop scar tissue, causing shin tightness. Shin splints manifests gradually, starting with a dull pain on the shin at the beginning and end of runs, easing somewhat during the middle. Over the course of a few days or weeks, the pain will localize to a small area less than two inches in size. Often it will hurt to press directly on this area of the shin, and hopping on one foot will hurt as well. If you continue to train, you will begin to experience pain with walking, and sometimes an aching sensation even at rest. While runners who reach this stage are generally in too much pain to run, continuing to put stress on the bone at this stage can result in a true bone fracture, which can put a stop to your running for a very long time. Sharp, localized shin pain associated with running that does not go away after a few days’ rest is a strong indicator of a bone stress injury.

Causes

Overtraining – excessive mileage, change in intensity or running surface. Bone stress injuries are most common in the first month of training as bone takes time to adapt to the new load placed upon it.

Biomechanics – over pronation, high arches and leg length difference have all been connected with stress fractures. Assessment from a sports injury specialist will help identify and treat these factors.

Running form – form is important to performance but also injury prevention. Excessive hip adduction and overpronation have been linked with stress fractures. Poor control of impact on landing also leads to increased bone stress.

Muscle Tightness – tightness in the calf muscles or tibialis anterior puts increased stress on the tibia. With a proper assessment a sports injury professional can add stretches to your treatment plan.

Range of movement – joint range of motion, especially if one ankle is stiffer than the other, can have an effect on running gait and biomechanics. Ankle dorsiflexion (upward movement) is essential during impact, if the ankle is stiff in this movement it often compensated by over pronating. This increases bone load on the tibia or fibula.

Muscle Weakness – strong muscles help to absorb the impact involved in running. Muscles also need endurance to keep working mile after mile.

General Health – women more often than men may have reduced bone density leaving them more at risk of stress fracture. This can be due to change in diet, conditions that affect the gut or bowel such as Celiac disease and Crohn’s disease, prolonged steroid usage or menstrual irregularities.

Treatment

You can treat shin pain with icing the leg muscles, reduced activity, and anti-inflammatories. Try running on a softer surface or use the treadmill until you feel better. In mild cases this may be enough. Compression socks may reduce shin pain. Stretching or foam rolling calf muscles and the tibialis anterior muscle in the front of your shin can also help.

If pain or soreness persists for two weeks or becomes severe, you should seek a professional diagnosis. With the risk of stress fracture it should be properly assessed to identify the cause and treated appropriately. It’s not worth ignoring the pain and risking a more serious injury – and a much longer recovery.

Active Release Technique® (ART) and **Cold Laser** are very successful in treating shin splints. At **Cold Spring Chiropractic** we locate the specific tissues that are restricted and physically work them back to normal texture, tension, and length by using various soft tissue manipulation methods. **Active Release Technique®** combined with **Cold Laser** treatment speeds the healing process by restoring the connective tissues and muscles back to healthy and functional levels, giving you increased strength and mobility which leads to improved performance.

At **Cold Spring Chiropractic** we employ the 3D Body View scan, which determines your stability index and is used to develop a personal recovery plan, and custom-fit orthotics if needed. The combination of custom orthotics with **Active Release Technique** and **Cold Laser Treatment** has been very successful in treating shin splints.

The techniques and therapy provided by **Jonas Chiropractic Sports Injury Care** are natural and non-invasive and have successfully helped many athletes come back faster from injury.

Dr. Jon DeGorter specializes in treating runners and triathletes, and is well versed in injury prevention and rehabilitation — keeping athletes doing what they like to do!