

Lower Leg Pain “Shin Splints”

Lower leg pain “Shin Splints” can lead to several types of syndromes. The first being lower leg tendonitis either posterior or anterior parts of the lower leg musculature which becomes inflamed. This usually occurs when an athlete has a breakdown in the kinetic chain and the biomechanics of the lower leg (pathomechanic breakdown). This is due to either return to running/activity, running too much too soon or muscular weakness and imbalance causing excess Pronation / Supination in the foot. Pronation of the foot or “flat feet” place excess stress on the medial side (inside) of the lower leg it may cause medial lower leg pain, medial knee pain, and lateral hip pain with running or activity. Supination (high arch) causes lower leg lateral rotation, this may cause lateral lower leg pain, lateral knee pain and medial hip pain. Also, it has been discovered that female athletes in the beginning stages of their menses have a decrease in bone mass which may cause breakdown in the bone itself causing increased chances of stress fracture. This phenomenon can cause these syndromes to begin in females earlier than in males and may be commonly miss diagnosed injury. Therefore, proper history taking, assessment and treatment is a must. Nutrition and proper diet is a very important component in the prevention of these very common but yet complex injuries. If lower leg tendonitis is not properly assessed and the athlete doesn’t seek treatment it can stem into a stress reaction in the bone which is caused by excess stress on the bone sheath (soft tissue covering) which houses the lower leg musculature. Lastly, is a stress fracture. These are micro fractures detected in the Tibia (Shin bone) of the lower leg. The biomechanics of the lower leg must be properly assessed in order to diagnose these syndromes so a proper treatment régime may be started. Typically, an athlete may also experience medial knee pain, lateral (outside) hip pain and lower back pain at the later stages (chronic) of these syndromes when they have not been properly treated. To avoid chronic problems these injuries should be addressed sooner than later by either your Athletic Trainer, PCP (primary care physician) or and Orthopaedic Surgeon. They will be able to order proper assessment, diagnostic testing and treatment to quickly get you back on the playing field.

Out of competition chart

Tendonitis: 3-4 weeks or when symptoms go away

Stress reaction: 3-6 weeks or when bone scan is negative and symptoms go away

Stress fracture: 4-6 weeks or when bone scan is negative and symptoms go away