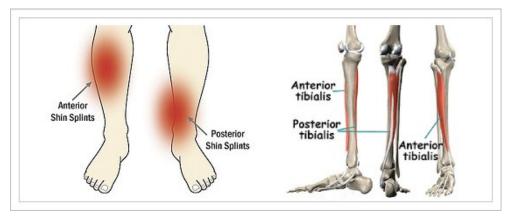


Shin splints are an overload injury to the connective tissue (tenoperiosteum) that joins the muscles of the lower leg to the

shin bone (tibia). Contraction of these muscles that is too forceful or repetitive, results in tissue breakdown and pain at this attachment point. This typically occurs due to excessive walking, running or jumping activities and is often seen in runners and footballers. Athletes can develop this condition early in the season following a period



of reduced activity (deconditioning) and when training on hard surfaces. Other factors that can contribute to the development of shin splints are: muscle weakness (especially the calf muscles), reduced ankle mobility, poor training technique or methods, poor balance, poor hip and knee control, being overweight and inappropriate footwear.

Diagnosis

Shin splints are diagnosed based on your medical history and a physical examination by your physiotherapist. Patients with this condition typically experience pain along the edges of the tibia. In severe cases, swelling, redness and warmth may also be present. Shin splints can often be confused with a stress fracture which will have a similar overuse history and presentation. The major difference between shin splints and a stress fracture is point tenderness. Shin splints will usually be tender all along the tibia, where with a stress fracture, pain is usually more localised.

Treatment

Treatment of shin splints will begin with activity modification. There is almost always an increase in exercise or training load that has led to the onset of the issues and decreased loading should allow the tissue to settle and to start to heal. Massage and stretching to any tight tissue in the lower leg will generally be beneficial as well as use of ice and autoinflammatory medication. Following this it is important to address any poor lower biomechanics, which may comprise of strengthening exercises, movement patterning drills and provision of appropriate footwear and supports.

Rarely does this condition not heal well with appropriate rest and treatment. Recovery time may range from a few weeks to many months depending on the severity of injury and how well guidelines for loading patterns are adhered to.

by Phil Ting