



# Newsletter



AUG/SEPT



## SHIN SPLINTS



### Overview:

Shin splints, or medial tibial traction periostitis, sometimes is used as a bit of a “catch-all” phrase for shin pain. While it is one of the most common causes of shin pain, not all shin pain is from shin splints.

A patient with shin splints most often experiences pain along the inner part of the shinbone, in the lower two thirds of the lower leg. The pain is usually diffusely located in this area. The pain often comes on at the start of exercise, and then gradually gets better through warm-up. Most people can complete their exercise session. The pain often returns after exercise and the next morning. There is typically no swelling, redness, or bruising associated with shin splints. While running is the most common activity associated with shin splints, any vigorous activity can cause it.

Shin splints are caused by muscles pulling on the bone tissue (periosteum) of the tibia. The muscles that are most likely the problem are soleus, flexor digitorum longus, and tibialis posterior.

Some factors that may predispose someone to developing shin splints include flat feet or overpronation (feet rolling inwards), muscle weakness, and poor flexibility. There are also factors in training that can lead to shin splints, including type and wear of shoes, training surface, and training schedule.

### Diagnosis:

The diagnosis of shin splints is generally clinical. Imaging can be done, but is not necessary. X-rays are usually negative. A bone scan may show diffuse increased uptake along the tibia. MRI may show reaction along the bone. Imaging should be done if the pain is more focally located, to rule out a stress fracture.

### Treatment:

Treatment includes determining any intrinsic or training factors that may have led to the pain and correcting these. Specific treatment options include:

1. RICE- rest, ice, compression, elevation Anti-inflammatory
2. Training modifications- this includes resting from aggravating activity (e.g. stopping running for a period of time) and/or switching to a lower impact activity like cycling or swimming until the pain improves
3. Physical therapy- this can include soft tissue manual therapy to relax the muscles, dry needling, and strengthening exercises
4. Orthotics (over the counter or custom)- to correct flat feet or overpronation
5. Taping- can try to control foot pronation
6. Modified weight bearing with an air cast boot or crutches for a short period of time

