



# Shin Splints

Muscles that Support the Arch get Overwhelmed

GETTING YOU BACK FROM INJURY FASTER

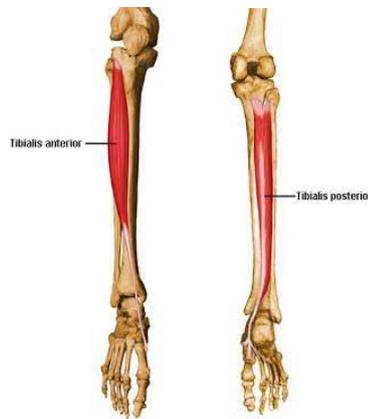
## Shin Splints

Muscles that Support the Arch get Overwhelmed

### What is it?

Tibialis Anterior and/or Tibialis Posterior tendonitis or “shin splints” generally refers to pain anywhere along the shinbone (tibia) between the knee and the ankle. It occurs as an overuse injury with damage and inflammation of the tendons and muscles that run up the shin. Shin splints is commonly seen in runners and athletes.

Signs and symptoms may include pain along the front inside edge of your shin. You may also have pain on the inner back side of your leg. The area may be tender to the touch and in some cases can become red and swollen. You may be able to reproduce the pain of shin splints by pointing your foot and toes down, but it is mostly aggravated by activity and exercise. Your doctor may consider an x-ray to rule out stress fractures and other conditions.



### How did I get it?

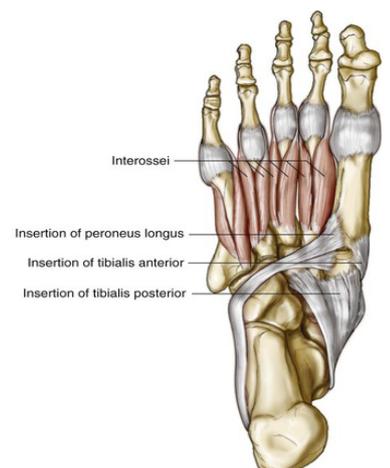
The primary cause of shin splints is the overuse of the involved muscle and tendon. This can happen with an increase in exercise levels, repetitive movements as in running and other stresses to the lower leg such as hard or changing running surfaces. Unsupportive footwear could also be a cause.

Another major contributor to shin splints is over-pronation or arch flattening. The muscles in your leg that are primarily involved are the tibialis anterior and tibialis posterior muscles. These muscles help support your arch. When your arch flattens these muscles can become overworked and start to break down causing pain and inflammation.

### How is it treated?

There are two main concepts in the treatment of shin splints: 1) the decrease of pain, inflammation or swelling and 2) addressing the cause of the condition.

Exercise: Stretching and strengthening exercises are aimed at lengthening and strengthening muscles in your lower leg to take the stress off your shins. Exercises that make your muscles stronger are usually effective in prevention of a recurrence once your shin splints have healed.



## Anti-Inflammatory Agent

These may include ice and oral anti-inflammatory medications. Ice can be applied directly to the painful areas of your shin. A compressive elastic bandage can be helpful if there is any swelling.

## Rest and Avoidance

Rest is often recommended to reduce inflammation and swelling. You may be advised to decrease your training time or distance until your shins have a chance to heal. You may also be advised to avoid activities such as running and try biking or swimming until your shin can heal. It is important to remember that although rest may decrease your pain temporarily, it does not address the reason why you have shin splints.

## Kinesio Taping

In some cases rest and avoidance is not possible do to sports, activities of daily living, or work related activites. In these cases, utilizing kinesio tape along the bottom of the foot, supporting the arch, can decrease pain and allow activity to be tolerated.

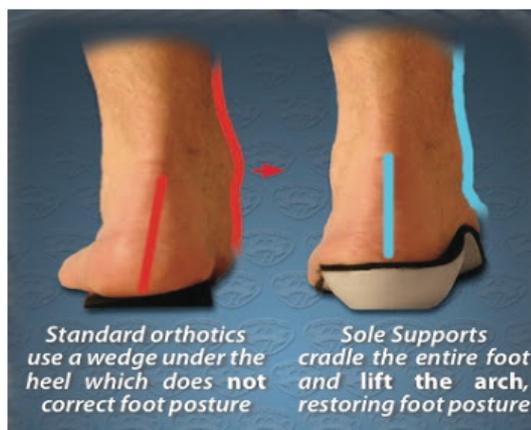


## Surgery

In very rare cases that do not respond to conservative measures, surgery may be considered to repair muscles and tendons that are severely damaged.

## Custom Orthotics

Properly designed biomechanical arch supports (the kind that actually change how your foot functions) are often the most effective treatment for shin splints. The right arch support will address both the current painful condition and prevent re-occurrence of the problem over the long term. A Sole Supports™ custom orthotic will cradle your arch –thereby relieving the stress of the muscle you have damaged. This is most effective in correcting the structural origin of the problem: a falling arch with every step. A combination of custom arch supports (to address the cause of your shin splints) and therapies (to decrease the inflammation) is the most effective strategy. Synergy Sports and Rehab is a partner with Sole Supports and can custom fit you for your orthotics.



## How long will it take to heal?

This depends on how long you have had the problem (chronicity) and how active you are. By correcting the cause of your problem with Sole Supports™, you can expect, on average, 50-70% relief the first month, 70-90% the second month, and 90-100% the third.

This document provides a general overview on this topic and may not apply to everyone. To find out if this condition applies to you and to get more information on this subject, talk to your health care provider.

