## What are they?



Shin splints are a condition that involves an inflammation to the shinbone of the lower extremity with or without involvement of the surrounding soft tissues. It is most commonly seen in runners or athletes and can cause considerable pain and lengthy periods of disability. It is a type of over use injury, meaning that as one trains harder and with greater distances, the athlete has a greater tendency to develop this condition. The primary culprit is a combination of

not stretching before exercise and over pronation of the foot. If the cause of the problem is not treated, a shin splints condition can lead to a rupture of an associated tendon or even a fracture of the shinbone itself. There are different types of shin splints, which are based upon their location in the lower extremity. The bottom line though, is that they hurt, cause varying degrees of disability, and usually require professional treatment.

## What causes them?

Shin splints can occur when one participates in an exercise that places a repetitive stress on the lower extremities. Running,

impact aerobics and the various racquet sports can all lead to the development of shin splints. Stress is placed on the tendons in the leg and causes an abnormal torque or tension. This abnormal force is due to the stress placed on the tendon to prevent it from tearing. The muscle starts to pull away from the bone and also causes the lining on the bone to be pulled away. This causes an inflammation of the bone, which causes pain.



## How do you treat them?

The treatment of shin splints begins with rest, ice, compression, and elevation. All of these should help to decrease the involved inflammation and pain. Further treatment includes non-steroidal anti-inflammatories (NSAID'S), such as Ibuprofen and other prescription medications. A

modification in one's training routine or the type of shoes worn will also usually help. A device inserted into the shoe called an **orthotic**, may eventually be needed to control the patient's mechanics and improve his or her weight bearing activities. Stretching before exercise and control of pronation is essential to try to prevent reoccurrence.