

## Shin Splints



View of the medial tibia and posterior tibialis

Shin splints is a term used to describe several conditions due to inflammation of the muscle-tendon attachments to the lower leg bone (tibia). Medial Tibial Stress Syndrome is also used to describe shin splints. The term shin splints should not be used to describe specific point tenderness on the bone (a possible stress fracture) or generalized lower leg muscle soreness (a possible compartment syndrome).

Shin splints are characterized by pain and tenderness along the inner aspect of the lower 2/3 of the tibia. The posterior tibialis and soleus muscles attach to the tibia in this area. The function of these muscles is to support the arch of the foot and to help the calf musculature point the foot. Shin splints are due to repetitive use of these muscles, resulting in an inflammation at their attachment sites on the bone.

### Symptoms

- Tenderness along the lower 2/3 of the tibia
- Pain/aching during activity, decreasing with rest. As the condition progresses, pain may be present when walking

### Causes

- Sudden increases in activity level, such as: running mileage, aerobics or jumping
- Activity on hard, uneven or banked surfaces
- Worn or improper shoes
- Foot/leg alignment problems such as excessive pronation, tight muscles or tibial torsion

### Treatment

- Modified activity (cycling, swimming or pool running) or complete rest
- Ice/cold whirlpool (15-20 minutes)
- Orthotics or arch supports
- Lower leg muscle stretching
- Graduated strengthening exercises for the posterior tibialis muscle
- Anti-inflammatory medication as prescribed by a physician
- Once pain free, gradually return to sports activities