

# Shin Splints

## MEDIAL TIBIAL STRESS SYNDROME



### DEFINITION

Shin Splints (medial tibial stress syndrome) is the general term used to describe inflammation of the postero-medial and anterior crest of the tibia, generally associated with overuse of the soleus fascia or the peri-osteal tissue beneath the posterior tibial muscle. It is a slow healing and painful condition and it is anticipated that between 10-15% of running injuries are shin splints.

### CAUSES

Commonly shin splints occur due to overuse or at the beginning of an exercise program if commenced too aggressively. There are often certain underlying biomechanical factors contributing to its development. Excessive pronation and poor shock attenuation may enhance eccentric contractions of the leg muscles and contribute to the development of shin splints. Shin splints can be classified into four grades.

**GRADE 1:** Pain on palpation of the medial tibial crest – asymptomatic when running

**GRADE 2:** Pain or discomfort after activity – but not during running

**GRADE 3:** Pain when running and residual discomfort after activity

**GRADE 4:** Pain and discomfort when engaged in simple walking

### TREATMENT

Early conservative treatment usually leads to a successful outcome. All sporting activity should be ceased or significantly reduced

Iceing the painful shin region, immobilisation and if necessary anti-inflammatory medication may help.

A physiotherapy assessment and program incorporating deep tissue massage, ultrasound and stretching and strengthening may also be required. This should also be continued on cessation of symptoms to prevent recurrence of original symptoms

The recognition and attention to any biomechanical abnormalities should be addressed with appropriate Realign innersoles or a visit to a Podiatrist for specialised biomechanical assessment and prescription orthotics may be helpful

Appropriate supportive footwear may be of some benefit

