

# **SHIN SPLINTS**

Shin splints are extremely common in the sporting population and used as a general term for people with pain at the front of their shins. They particularly affect people who participate in repetitive activities such as running and jumping. The 3 major causes of shin pain are:

# **Tendonopathy**

This is the most common cause of shin pain and occurs when repetitive 'pulling' of the muscles on the soft tissue covering of the tibia (shin bone) causes an inflammatory response. In some cases this can cause microscopic tearing, therefore resulting in pain. For milder cases, pain will generally be felt after activity, and more severe cases will interrupt activity and become constant in nature. The shin will also generally be tender to touch.



If symptoms relating to a tendonopathy are not adequately addressed by a physiotherapist or sports physician, repetitive stress on the bone may cause a tiny fracture in the tibia, otherwise known as a stress fracture. Although symptoms are similar to those of tendonitis, pain may be experienced during the night (sleep disruption) and may prevent participation in sport all together. Symptoms generally worsen over a period of several weeks to months.

### **Compartment Syndrome**

Compartment Syndrome, although less common, is not to be missed. The muscles of the shin are wrapped in a very thin layer of tissue called fascia. In some athletes, when the muscles of the shin swell, the in-elasticity of the fascia restricts blood flow to the muscles, causing widespread and severe pain upon activity. This pain will generally settle with rest, but return once activity or sport is resumed. If untreated, this can lead to muscles tissue damage and possibly require surgery to release the tension from the fascia.

Some factors that may contribute to shin pain include:

- Poor foot biomechanics and poor footwear
- Repetitive impact activities such as running and jumping
- Sudden changes or increases in activity
- Poor muscle flexibility
- Imbalances in muscle strength in the calf and front of the shin
- Participating in sport or activity on a hard surface
- Altered running technique

Early intervention with a physiotherapist is the best course of action for shin pain. Using a hands on and exercise based approach, your management program will involve suitable modification of activity, pain management strategies, a stretching/strengthening program and possible referral to our podiatrist to assess footwear, running technique and possibly prescribe orthotics.

333 Old Geelong Road Hoppers Crossing 3029 P: 9369 4999 com.au

412 Derimut Road Tarneit 3029 P: 8742 2088 tarneit@symmetryphysio. taylors@symmetryphysio. com.au

## Taylors Lakes

1/900 Old Calder Hwy Keilor 3038 P: 9390 8488 com.au