

Shin Splints

by Kate Carter, Brighton University

What is it?

Shin splints is a term used to describe a group of leg injuries. One specific type of shin splint is *medial tibial stress syndrome (MTSS)* and is a common cause of exercise related leg pain.

The pain of MTSS is along the inside of the lower half of the shin bone (the tibia). Long term repetitive sports activities cause excessive stress and strain at the location where the soft tissues such as muscle and fascia attach to the shin bone.

Who gets it?

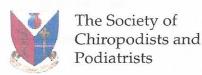
It can occur in physically active individuals as well as in athletes. It is usually seen in runners, sprinters and long-distance runners, and the injury rate is higher in females. Other sports in which athletes are most commonly affected are tennis, gymnastics, long jumping, basketball and volleyball.

What are the symptoms?

The most common symptom is generalised pain and tenderness that can be felt along the inside of the lower half of the shin. Other symptoms and signs include:

- Pain that occurs at the beginning of a run that may subside during the middle but recurs at the end of the run
- Pain gradually returns after exercise, can take several hours to go and is sometimes present the next morning.
- Pain made worse by repetitive weight bearing activities.
- · Some swelling may be felt along the shin.

Please turn over...





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What can I do to prevent it?

Podiatrists recommend you wear the correct shoe for your foot and for the type of sports activity you are doing. Go to a good sports shop and have your feet fitted for the correct sports shoe.

Tight calf muscles may contribute to the development of MTSS. Tight calf muscles can reduce ankle joint motion, affect foot function and can limit shock absorption when the foot contacts the ground in walking and running. Stretching your calf muscles correctly may help to prevent MTSS.

Other factors that may cause MTSS include training on a hard surface or uneven terrain, incorrect training techniques and increasing training intensity too quickly. Having the correct training programme for you will ensure you maximise your performance and fitness, and can help to prevent injuries.

What should I do if I have medial tibial stress syndrome?

If you experience any of the symptoms, see your podiatrist as soon as possible. They will be able to assess and diagnose the problem and advise on the best course of treatment. If treated early, you can avoid any long term problems and damage. An accurate diagnosis from a health professional is essential as this is also a common location of stress fractures of the tibia and other problems.

If you think you have MTSS you should:

- Rest as much as possible and especially avoid high impact activities. You could maintain your fitness with low impact activities such as cycling and swimming.
- Stretch your calf muscles at the back of the leg while you are resting from sport.

What can a podiatrist do?

A low arched foot has been identified as a factor that can contribute to the development of MTSS. A podiatrist can assess the alignment of your foot and leg when standing, walking and running, to determine whether you would benefit from an orthotic in your shoe. Orthotics can improve foot position and function, which may help to reduce the stress along the shin in MTSS. A podiatrist can also advise on an appropriate sports shoe and a muscle stretching programme to address any muscle imbalances or muscle inflexibility you may have.

Kate Carter, Senior Lecturer, University of Brighton, Division of Podiatry, e-mail: K.F.Carter@brighton.ac.uk

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