

Medial Tibial Stress Syndrome (MTSS) AKA shin splints

tips for best management

1. Diagnosis is with simple palpation:

Tenderness to palpation of the distal 2/3 of the medial Tibial border & adjacent musculature is diagnostic of MTSS. MRI can rule out stress fracture if suspected with symptoms of pain at rest & a more localised bony tenderness to palpation over the Tibia.



2. Tissue overload is the cause

Traction on the periosteum from the fascia's attachment to the distal medial Tibia's border has been one proposed injury mechanism. The other theory is a bony stress reaction from micro bending of the Tibia itself, which may eventually develop into frank stress fracture if continued overloading occurs with running or jumping. In both cases the cause is tissue overload due to three factors: increase in training volume, biomechanical inefficiencies, & poor running technique.

3. Treatment should address the 3 main issues:

- I) load** - initially reduce the load on tissues to allow symptoms to settle, but with the least deconditioning as possible. If symptoms are mild, rest from running & jumping may be all that is required. Other support can include taping or a soft orthotic if symptoms are still present. A walking boot may be required if symptoms are constant & severe with everyday walking (usually due to a Tibial stress fracture). Once your patient is comfortable again, gradually wean off the support given (orthotics, taping or walking boot) & back to their regular activity.
- II) whole body biomechanical efficiency** - assessment of the whole body for muscles & joints that are not moving well which lead to inefficiencies in running pattern. Then specific treatment to improve the movement of identified joints & muscles.
- III) running technique** - poor running or jumping technique can increase the loading at the Medial Tibia. Analysis & correction of technique flaws are important to prevent recurrence.



we have a good supply of walking boots with excellent stability & comfort for immediate fracture management or conditions requiring immobilisation.

we also treat the whole body & pride ourselves on staying updated with current evidence based practice

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