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
   boney 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 boney 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. This may lead to inefficiencies in running pattern. Specific treatment
   needs to be targeted to the identified joints & muscles to improve running efficiency.

   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
references:

