



Movement Health Performance

SOFT TISSUE INJURY:

CALF STRAIN



A calf strain is the tearing of one or more of the calf muscles causing pain in the back of the lower leg below the knee.

There are two main muscles that form the calf:
→ gastrocnemius (bigger muscle at the back of the lower leg)
→ the soleus (smaller muscle lower down).

Both muscles contract to produce Plantarflexion at the ankle (pointing of the toes). It is more common to strain your gastrocnemius.

Calf strains usually occur due to sudden contraction of the calf muscle in position of stretch e.g. accelerating from stationary, jumping, hopping, lunging forwards
Or due to gradual overuse, wear and tear. Repetitive jumping, running especially up hills or uneven surfaces

Symptoms:

- Mild strain can feel like an ache during / after exercise
- More severe strain feels like a sudden sharp pain
- Bruising and swelling may occur

Factors contributing to the injury:

- Poor calf flexibility
- Limited or too much training or activity
- Inadequate recovery time between activity
- Ankle joint stiffness and limited rom
- Muscle weakness
- Poor rehabilitation following previous injury

Muscle strain Grading: *dependent on severity of the injury*

Grade 1 = mild strain, only a few muscle fibres. Little pain and does not impair functional activity

Grade 2 = moderate strain, more muscle fibres but not a complete rupture. Recovery time is longer and produces significant pain and some loss of function

Grade 3 = severe tear, most of the muscle fibres torn or complete rupture. Brus

Recovery and Rehabilitation

Initially the goals are to control any inflammation, swelling and pain.

Rest preventing any further injury and allowing the healing processes to begin. Reduce the amount of walking and stressful activity, whilst still gently exercising the calf to avoid stiffness.

Ice can help to reduce pain around the calf muscle. Apply for 10-15 mins a day every couple of hours for the first few days after the injury.

Compression bandages can be useful at the acute stage of injury to provide support and reduce swelling initially.

The rehabilitation goals then shift towards regaining full pain-free ROM and resuming normal weightbearing and walking before strengthening.

Full ROM, movement, strength, balance and proprioception should be restored as you return back to sport / activity fully.

During the later stages of rehab **massage** can be beneficial alongside **foam rolling** and regular strength work and stretching.

