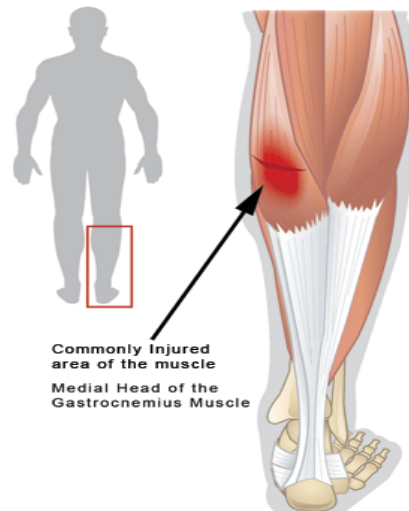


Gastrocnemius (calf) strain

The calf muscle refers to the two muscles at the back of the lower leg which join to form the Achilles tendon. The larger of these muscles, the gastrocnemius, provides the sudden explosive drive used in the initial take off in running. This muscle is the most commonly torn of the two muscles, especially for those in their forties.



A gastrocnemius strain typically occurs when the muscle is contracted in a lengthened position, such as accelerating from a standing start, lunging forward and/or stepping in a pot hole while running. Factors which contribute to a gastrocnemius strain include inadequate warm up, muscle stiffness or tightness, fatigue or overuse, reduced muscle strength, inadequate rest periods and/or faulty biomechanics.

A gastrocnemius strain is associated with sudden pain in the calf muscle at the back of your lower leg. You may also feel a tearing or pulling sensation. In minor strains you may be able to continue participation in your activity, however most commonly a gastrocnemius strain causes an inability to continue your sport due to excessive pain, muscle tightness and spasm. In more severe cases, you may have an inability to weight bear on the affected side.

To reduce the severity of the injury, including swelling and bleeding, you should perform the RICE method in the first 72 hours. This includes:

- Rest
- Ice – every hour for 20 mins, using a damp cloth in between you and the ice
- Compression – including the joint above and below the injury
- Elevation – of the injured part, preferably above heart level

In this period you should try and avoid heat, alcohol, running or massage to the affected area.

Treatment for a gastrocnemius strain can involve a variety of options. Firstly the physiotherapist will conduct a thorough assessment of your condition to determine the most appropriate treatment program for you, and to rule out the possibility of any secondary complications. At this point the physiotherapist may require the use of medical imaging, such as a MRI or ultrasound, to truly determine the severity of the condition. Your medical practitioner will assist in this process

Treatment may involve a combination of:

- Stretching
- Deep tissue massage
- Ultrasound therapy
- Eccentric strengthening exercises
- Correction of biomechanical abnormalities
- Advice on appropriate time to return to activities