

Calf Injuries

The calf complex is the muscle group at the back of the lower leg. It is essential to push off and land when running or walking and is used heavily in the kick and push off in swimming and with the pull through action on the bike. As a result of its heavy involvement in all exercise it is often injured.

If the calf is not properly warmed up and stretched prior to and during exercise it is prone to tearing of the muscle or tendon fibers. This is a sprain. Rest is important until healing takes place. In the first 3 to 5 days you should do very little. Use crutches if the tear is

bad. This keeps the rest of the body moving as normally as possible and avoids secondary compensations in the rest of the body due to poor movement patterns. Ice for 20 minutes every 2 hours is ideal - protect the skin from ice burns. Use a tubular elastic bandage to provide compression to the muscle to minimise swelling. Elevate the leg where possible - at night put pillows under the end of the mattress to lift up the lower leg. You would be better in shoes with a small heel - this takes the stretch off the calf and allows you to walk with less pain. After the initial 3-5 days you can start to exercise

as able. This will include stretching. A gastroc stretch is with the back leg straight, heel on the ground

A soleus stretch is with



the knee bend.

Hold the stretches just on

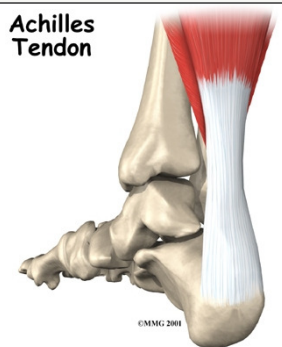


the edge of the discomfort for 20 seconds, 3 times and repeat 3 times a day. Most importantly, you

need to regain the strength in the calf. In the normal population you should be able to do 25 calf raises, that is, holding onto the wall and raising onto the toes of one leg. In the athletic population this should be closer to 35. Build up slowly to return to your normal exercise. Break your normal runs into shorter, slower sections with a walk in between. Start steps up slower and on a lower step. Start bike sessions on the flat and staying in the saddle. The time to return to full pre injury status depends on many factors, the severity of the injury, the structure injured (tendon takes longer than muscle). The best thing is to avoid the injury in the first place!

Achilles Tendinopathy – Is It Your Achilles Heel?

The Achilles tendon is the thick band of tissue that joins the lower part of the calf (the muscles at the back of the lower leg) to the heel. These muscles play an essential role in pushing off the ground when walking and running but also in absorbing forces as



you land. Sudden increases in the amount of exercise you are doing, especially where there are larger forces involved, for example, running further, running uphill, playing more tennis etc, can often result in the break down of the Achilles tendon.

This results in Achilles Tendinopathy. Treatment involves reducing your activity to the point where the tendon is no longer irritated. This does not mean to stop exercising. In fact rest has been shown to be of little benefit to the overall healing of tendon inju-

ries. It may be you have to stop tennis or running, but you can still cycle or swim. There is a very specific strengthening protocol which was devised in the 1990's by a surgeon called Alfredson. He found that careful raises up onto your toes on both legs and then lowering your heel back to the ground on the sore leg, repeated correctly, resulted in resolution of the symptoms over several months. This can be incorporated with stretching and release of the calf complex, for example using massage or dry needling.

Another small but important things to consider when standing is to stand with your weight 2/3 on your heels. If you are on your toes your achilles tendon is under constant strain. Sit with your feet flat on the floor - this will keep the Achilles from knotting up each time you sit. Recovering from a tendinopathy is a slow process. It takes time and careful exercise progression. If this injury is already plaguing you or if you just want to find out more please feel free to contact the team at Physiologix upstairs!