Recurrent Calf Injuries

The best predictor of future injury is past injury.

Let that sink in a minute, yes, there are many other contributing factors. But research tells us that one of the only things we can use for injury prediction, is your past history of injury. So, if you are the runner who seems to always have a ‘niggle’ in your calf – this is for you.

First, let’s define a ‘calf injury’. This term tends to refer to an injury to either your gastrocnemius or soleus muscle. The two large, important muscles at the back of your leg. The ‘injury’ occurs at the muscle or close to the musculotendinous junction (where the muscle meets the achilles tendon). Muscle strains and tears are graded from 1 – 3, with 2 & 3 involving physical tearing of muscle fibres. However, there are many other problems that can occur in the lower leg, so it is important the diagnosis is correct.

E: admin@ibphysio.com.au | T: 02 9976 3540 | F: 02 9976 3290 | Suite 14, Level 2, 22 Darley Road, Manly, NSW 2095 Australia

4 important areas to ensure you have addressed when rehabbing a calf injury are…

- Strengthen
- Neurodynamics
- Running technique
- Footwear

Did you strengthen?

As usual you need to strengthen the affected area well after injury. Single leg calf raises alone are NOT enough. When you run, jump, hop and change direction, anywhere between 3-8 x your body weight is transferred through your lower limb. Simply completing strength exercises without additional weight is not providing the same stress and load to your muscles and joints. You need to be completing 2 or 3 tailored strength session per week to ensure you have adequate strength in your legs. Exercises such as **heavy weighted** single leg calf raises, lunges and squats, plyometrics and stability work will have your calf coping with these increased loads better in no time. Here are some examples of a single leg calf raise and a split squat that will help build muscle to support you when you run.

We recommend working towards doing a single leg calf raise with a weight. Start lightly and build up to 3 sets of 8 with a weight that makes you work hard!

E: admin@ibphysio.com.au | T: 02 9976 3540 | F: 02 9976 3290 | Suite 14, Level 2, 22 Darley Road, Manly, NSW 2095 Australia

E: admin@ibphysio.com.au | T: 02 9976 3540 | F: 02 9976 3290 | Suite 14, Level 2, 22 Darley Road, Manly, NSW 2095 Australia

Is part of the problem coming from your nerve?

Often, we focus heavily on addressing the muscle in the calf and neglect the large tibial nerve that runs right down our calf. When there is restriction of mobility of this nerve, it can cause a sensation of pain, tension and compression in the calf. The symptoms often present similarly and are therefore misdiagnosed as injury to the muscle. It can even lead to the 'cramping' type sensation some people commonly describe. It is important to address any muscle tightness which may be restricting the mobility of the nerve, both within and external to the calf, and your physio can guide you on this. Once this has been addressed, there are some simple nerve gliding exercises which can be done to restore normal mobility of the nerve through the tissue. An example of a tibial nerve gliding exercise is shown below: Turn your foot inwards slightly, then slowly bend and straighten the knee. Repeat x20.

E: admin@ibphysio.com.au | T: 02 9976 3540 | F: 02 9976 3290 | Suite 14, Level 2, 22 Darley Road, Manly, NSW 2095 Australia

How do you run?

Running technique is not the same for everyone and there will always be slight variation in our running styles. However, there are some basic efficiency corrections that can be made and will often help reduce strain on different muscle groups. Some of the most common include overstriding and excessive vertical travel. As this is very specific and requires a trained eye, we recommend a visit to your physiotherapist for a running gait assessment. Kieran, one of our physio's here at In Balance, has a special interest in running and would love to help you out!

Answer honestly, how old are your shoes?

Yes, your 2-year-old shoes with the tape in the back and the grip worn out might be comfortable, but they are most definitely not helping you reduce strain and load on your muscles and joints. A good pair of shoes can improve and alter how you are loading. Again, shoe preference and comfort will vary hugely between each person, so you need to ensure you choose the right shoe for you! A good shoe for running needs to be supportive, have plenty of cushioning and help to correct foot position throughout your stride. Your physiotherapist can talk through this with you and point you in the direction of some options to try.

Article by Hannah Graham

E: admin@ibphysio.com.au | T: 02 9976 3540 | F: 02 9976 3290 | Suite 14, Level 2, 22 Darley Road, Manly, NSW 2095 Australia