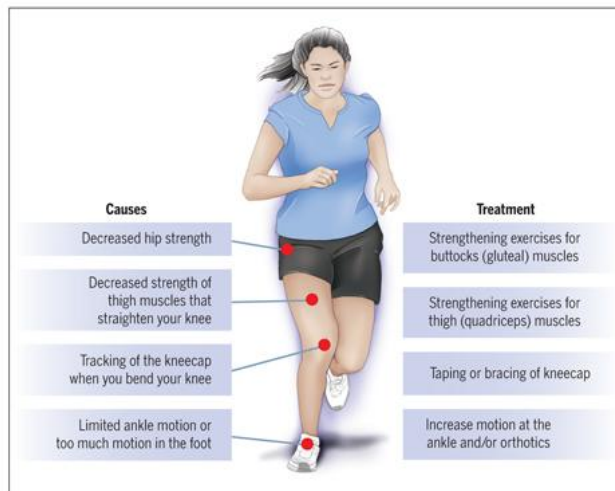


The front of my knee is painful every time I run. How do I stop it getting sore?

The most common running injury to get is pain in the front of the knee (patella-femoral joint). The pain is a result of placing too much stress on this joint. The pain comes from inflammation or damage to one or a combination of the following: joint, tendons, muscles, cartilage, fat pad or bone. Pain often starts after running but can eventually become painful with other activities such as sitting, driving, going down stairs or walking down hill.



KNEE PAIN TREATMENTS. Several evidence-based treatments are available to address anterior knee pain. A thorough evaluation will help define the right treatment approach for your knee pain. Your physical therapist can determine whether you will respond better to a treatment program that is focused at your hip, knee, ankle, or foot.

There are numerous reasons why the front of your knee may be getting sore. Muscle imbalances, particularly in your quadriceps muscle which is the big muscle of the knee joint

- Poor running technique,
- Poor leg alignment
- Too much running
- Too much sitting particularly with your feet bent underneath your knees
- Inadequate stretching or poor flexibility
- Poor footwear
- Flat feet (pronated feet)
- Poor lower back and hip muscle strength (core stability)

As with most soft tissue injuries the **initial** treatment is POLICE – Prevent further damage, Optimal Loading, Ice, Compression, Elevation.

Preventing Further Damage

If you have developed pain in the front of your knee the most important thing to do is to minimize the amount of further damage you do. The easiest way to do this is to stop or minimize any activities that cause your knee to get sore. If you continue to run or aggravate the pain in the front of the knee you risk causing permanent damage. If you damage the cartilage in your knee cap you have a high probability of never being able to run again pain free.

Optimal Loading

If your Chartered Physiotherapist diagnosis you with anterior knee pain then you will most likely be told to take a break from running. Discuss with your physiotherapist what physical activity you can safely participate in. There should be lots of alternate sports and exercises that you will be able to do while you take you are not running such as cycling, swimming, stretching, pilates and strength work.

Pain Relief

Depending on your diagnosis your physiotherapist will develop a plan to decrease the pain in your knee. Common treatment techniques used are sports massage, trigger point work, dry needling, stretching, pilates, core work, balance exercises, electrotherapy, taping and orthotics.



At home you may gain pain relief from icing the area. Use ice packs with a *thin towel layer between the ice-pack and your skin* (never put ice directly on the skin) for 20 minutes at a time. In the early stages of healing (within 48 hours of injury), you can apply an ice pack in 20 minute increments every 2-4 hours. Medications as prescribed by your pharmacist or GP may also help.

Returning to Sport

Your Chartered Physiotherapist will guide you back to full running training once your pain has gone away and your flexibility, muscle strength, balance and running technique have improved.

Tips to avoid injuring the front of your knee

- Good general conditioning is important to control and prevent knee pain. If you're too heavy, you may need to lose weight to avoid overstressing your knees.
- Before running or any other exercise, first do a 5-minute warm up, followed by stretching exercises. Stretching will help keep the supporting structures around the front of the knee flexible and less likely to be irritated with exercise.
- Avoid sudden changes in the intensity of your running or other exercise. If you plan to increase the force or duration of training, aim to do so gradually.
- Run on grass where possible, avoid tarmac and concrete.
- Use running shoes with good shock absorption and preferably that are designed for running outdoors. Ensure that your shoes fit properly and are in good condition.



References

1. Miller, David, Nezar Tumia, and Nicola Maffulli. "Anterior knee pain." *Trauma*7.1 (2005): 11-18.