

Anterior Knee Pain

Anterior knee pain, medically referred to as patellofemoral pain, refers to pain felt across the front of the knee. Those with anterior knee pain will find activities such as the stairs, running, jumping, and standing up from a chair provocative. They may also dislike their knee being bent for a prolonged period of time.

The patellofemoral joint acts as a lever. The knee cap, or patella, is a disc shaped bone that runs up and down a groove at the end of the thigh bone, or femur. The control of the joint is entirely dependent upon the surrounding structures. These include the soft tissues such as the Iliotibial Band (ITB) which runs down the outer edge of the thigh, and the quadriceps muscles which run down the front of the thigh and over the patella. An imbalance in these structures can lead to a dysfunctional movement pattern whereby the patella no longer runs smoothly up and down in its groove.

Some common contributors to developing anterior knee pain include one of the quadriceps muscles being weaker than the rest, or tighter on one side than the other. The key to treating your patellofemoral pain is addressing the mechanics of how you use it. The likelihood is one of these factors will be more prevalent than another, but usually both soft tissue tightness, and muscular coordination need to be addressed.

There are various conservative treatments you can try to aid your pain. Addressing the tension in the quadriceps muscles and the ITB can be done with some simple regular stretches. Perform these exercises little and often throughout the day. Strengthening your quadriceps muscle, particularly the inner muscle called your VMO, will make your joint more stable. Build the control around your knee with balance exercises. Monitor the alignment of your leg. Ensure your knee travels directly forward over your toes when you bend, squat, or go up and down stairs. This will promote better synchronicity between your quadriceps muscles, and ultimately enhance the function of your knee, getting you back to doing what you love.