



THE REHAB ROOM

Iliotibial Band Friction Syndrome

The Iliotibial band (ITB) is a very common cause of pain on the outside of the knee. The ITB is a thick band of fascia that originates on the pelvis and runs down the side of the leg where it inserts just below the knee.

ITB friction syndrome is an overuse injury that is very common in runners, cyclists and hikers. It is a result of the ITB rubbing against the lateral aspect of the femur. This friction then causes inflammation and pain. Patients usually complain of an “aching pain” on the outside of their knee which is aggravated by running, hiking or going up and down stairs. The knee pain usually comes on around the same distance into every run. Athletes who suffer from ITB friction syndrome have usually recently increased their mileage or have been completing a lot of hill running.

ITB friction syndrome may be due to a number of factors, one of which is weakness in the core and/or hip abductor muscles. If these muscles are weak then the knees will have less control. If an athlete presents with ITB friction syndrome, physios will usually assess the strength of their glute medius muscles and focus on strengthening it. An effective exercise to strengthen the glute med muscle is the “clams”, which is shown in the picture below. This exercise is performed with the athlete in side lying. Lying against a wall is useful because it stabilises the pelvis which allows you to target the glute med muscle more effectively. While keeping the feet together, the athlete then opens one knee and then lowers it again. This action is repeated until the muscle fatigues and you start to feel a burning sensation around your hip. This exercise is usually performed 3-4 times per week.



Another cause of ITB friction syndrome is poor running biomechanics or overpronation of the feet (feet rolling inwards). Both of these problems may increase the internal rotation of the knee and therefore lead to increased rubbing of the ITB.

Some of the treatments include...

- Activity modification. Decreasing the aggravating activity is very important in the treatment of ITB friction syndrome. The ITB needs to be able to settle down and avoid being constantly irritated. If the aggravating activity is not reduced then the condition will continue for a much longer period. Returning to full training can be guided by the physio.
- Trigger point release to the tensor fascia lata (TFL-the muscle attached to the ITB above the hip) and glute muscles. Recent research has shown that stretching and rolling the ITB does not actually increase the length due to it being composed of dense fascia, rather than muscle. The TFL can be targeted by using a spikey ball in the same position as the clams exercise. The positioning of the spikey ball is shown in the pictures below.



- Ice. Icing the ITB after completing the aggravating activity can help reduce the inflammation.
- Soft tissue therapy. Physios may use soft tissue release techniques such as massage to reduce the tension on the structures around the knee which may also be causing irritation.
- Orthotics and Podiatry intervention. Orthotics will greatly help anyone who has over pronating feet. Podiatrists and physios can also assess running gait which will help highlight where the problem may originate from.

ITB friction syndrome usually responds well to conservative treatment and takes around 6 weeks to settle down. This time frame may vary depending on how long the athlete has had the knee pain for. Once the condition has been treated normal training can resume!

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