

Iliotibial band Syndrome

Iliotibial band syndrome (ITBS) is common. We see it in 10-15% of runners. It can develop with an abnormal gait or if your muscles : core, hip and knee are not well balanced.

It was suggested that the movement of the ITB around the femoral condyle causes the pain, but more recently it was shown that the increased tension in the ITB causes an enthesopathy or bone pain at the ITB insertion or Tensor fascia latae origin.



Symptoms:

Pain often described as “burning” along the lateral aspect of the knee, thigh or both.

Potential factors that can lead to ITBS:

- Excessive pronation (Causes internal tibial and femoral rotation - increasing the stress onto the ITB)
- Excessive downhill running (increasing friction forces at the ITB)
- Lack of pre and post exercise stretching
- Increasing our mileage to quickly
- Running on uneven surfaces
- Excessive lateral hip sway with running
- Toe-in running gait (internal rotation of tibia and femur)
- Slow running stride rate (increased contact to the ground -increased friction)

Sport specific adjustment:

For cyclists:

- Poor cleat position causes ITBS when cleats are excessively rotated internally
- Incorrect saddle height - saddle height should be set so that your legs are almost fully extended (about 15 degree angle at the knee) at the bottom of each pedal stroke.
- Saddle positioning too far back causes tightening of the ITB
- High resistance training causes overstraining of the ITB

For runners:

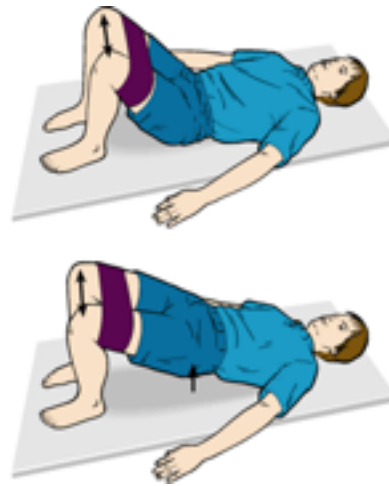
- Wear the correct shoes
- Avoid training on uneven surfaces as the down leg would be predisposed to ITBS
- Avoid excessive down hills during training
- Replace running shoes before they have a high mileage. They lose their shock absorbing capability (If you can fold them double its time for a new pair)
- Slowly increase training mileage
- After a run stretch and ice your ITB for 20 minutes
- Follow a proper strengthening and stretching program

Treatment:

- Prevention - well balanced. It is important that you go for a CYBEX and are rehabilitated adequately by your physio, chiro and biokineticist. This includes a gait analysis and proper shoe wear
- Rest
- ICE
- Anti-inflammatory medication
- Cortico steroid injections
- Surgery

Suggested stretching and strengthening:

There are several preventative measures that you can take to avoid IT Band Syndrome, including foam rolling, stretching, and strengthening exercises. When foam rolling, it is important to not only focus on the areas where you may be experiencing some discomfort, but also the areas in close proximity. We always instruct our patients to roll out the outside of the hip, targeting the TFL (tensor fascia lata muscle) and gluteus, and also the quads. Gluteus m strengthening exercises can also assist in restoring muscle balance between the gluteal and TFL muscles. We generally recommend clam shells and glute bridges as a good place to start.



Some exercises are described below which help in strengthening the muscles and dealing with the tensor fascia lata pain.

- Outer Hip Stretch



Start by lying down on the back, and bend your right knee. Cross the bent leg over the left knee and pull with your left hand. Hold this position for 10 to 30 seconds. This exercise stretches the gluteus medius, gluteus minimus and tensor fascia lata muscles.

- Standing Outer Hip Stretch



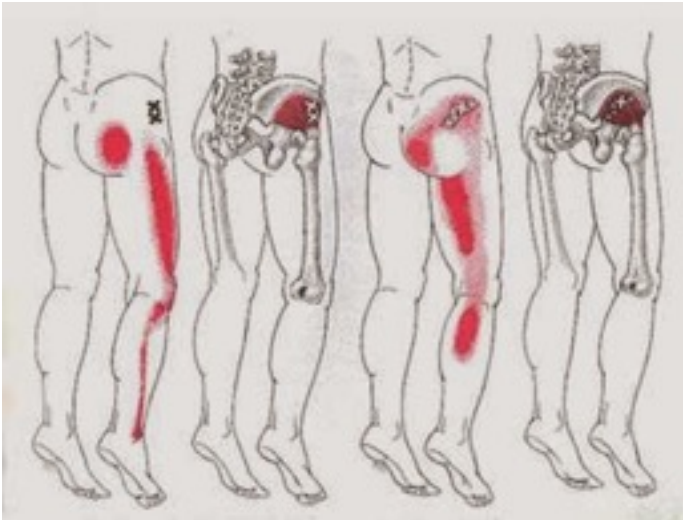
Start by placing the leg to be stretched behind the other leg. Lean your body on the side, which is not going to be stretched. The hip to be stretched should be pushed out to the other side. Hold for 10 – 30 seconds. The muscles stretched in the exercise are TFL, Iliotibial band and Sartorius.

- Hip Abduction with Band



This exercise is done to strengthen the hip abductors present on the outside of the joint. To start wrap a resistance band around the ankle and other end to a doorway or chair leg. Stretch the leg outside, as far as possible and slowly come back to position. Muscles stretched in this exercise are TFL, Gluteus medius and gluteus minimus.

- TFL Trigger Pointing



A trained person should help you in this exercise. A massage ball is laid on the bad side, under the TFL and moved around. It helps in identifying the painful or sensitive spot. The pressure is maintained for 10 – 15 seconds till the tenderness decreases. It should be done twice in the beginning, and repeated every 2-3 hours.

- Squatting Exercise



Squats are helpful in strengthening the TFL muscle and also in increasing the hip rotation and flexion. To start stand with the feet at shoulder distance, keep the back straight and abdominal muscles pulled in. Bend your knees while pushing the butt out, till your thighs are parallel to the floor. Push upwards from the heels and stand straight. This can be done 5 to 10 times.



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