

# IT Band Friction Syndrome (ITBFS or ITBS)

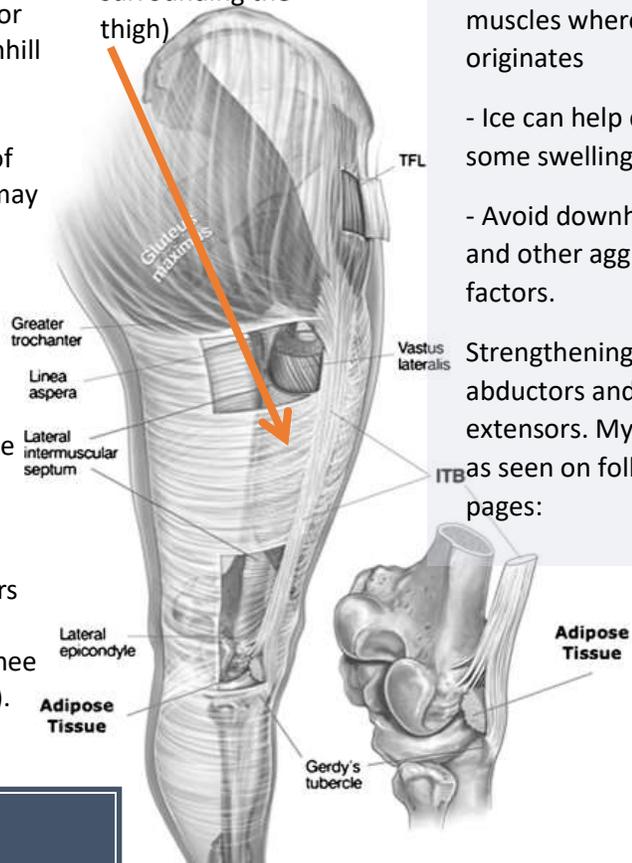
Iliotibial band friction syndrome is an overuse injury presenting as lateral knee pain that is worse with sporting activities. It is more commonly seen in runners, cyclist and military personal.

Pain is usually caused by a thickening of the ITB near the bony structure of your knee called the lateral epicondyle. This causes the ITB to rub against that lateral epicondyle and creates pain. It is important to note that the ITB is not just one band on the side of your leg but a lateral thickening on a circumferential fascia that covers the entire thigh like a stocking. (see

## Features

- Typically, you will have pain near the outside of your knee which is worse with running or cycling. Longer training sessions and downhill running often makes ITBFS worse.
- Pain over the lateral epicondyle (outside of knee) upon palpation and some swelling may be felt here as well.
- Repetitive bending of the knee may reproduce the pain.
- Tightness of the ITB is usually due to tightness in the TFL muscle or GMax or due to an overactive vastus lateralis (quad muscle).
- Usually associated with weak hip abductors (gluteus medius and TFL) and sometimes associated with weak hip extensors and knee flexors (Gluteus maximus and Hamstrings).

image below demonstrating the “stocking” surrounding the thigh)



## Treatment of ITBFS:

- Find out what is causing the ITB, whether it'd be from improper biomechanics, improper shoe ware, or training error.
- Soft tissue mobilization such as Graston to the ITB and to the Gluteal muscles where the ITB originates
- Ice can help decrease some swelling.
- Avoid downhill running and other aggravating factors.

Strengthening hip abductors and hip extensors. Myrtle Routine as seen on following pages:

### Caution:

There are some several differential diagnoses that present like ITBFS that you should be aware of. **An L5 nerve root lesion** in your lower back can cause radiation of pain that travels down your ITB and make you think that you have ITBFS when you may have something else. A lumbar nerve root lesion can be caused by several things like a bulging disc, narrowing of the IVF, degeneration, and space occupying lesions, to name a few. It is important to get an accurate diagnosis before implementing any type of treatment

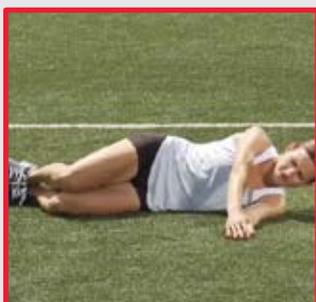
### Disclaimer:

This document provides general information and discussions about health and related subjects. The information and other content provided in this blog, or in any linked materials, are not intended and should not be construed as medical advice, nor is the information a substitute for professional medical expertise or treatment. If you or any other person has a medical concern, you should consult with your health care provider or seek other professional medical treatment. Never disregard professional medical advice or delay in seeking it because of something that have read on this document or in any linked materials. If you think you may have a medical emergency, call your doctor or emergency services immediately.

## Myrtl Routine

The Myrtl routine gets its name because it focuses on your “hip girdle”. All the exercises in this routine either strengthen or help provide a greater range of motion in this area.

### 1. Clams



Lie on your side and make a 45-degree angle with your knees. Bending from the hip, move your leg up to 60 degrees, making your legs look like a clamshell opening up. Lower and repeat. Complete 8 reps on each side.

### 2. Lateral Leg Raise



Lie on your side with your leg straight. Lift your leg to 45 degrees and then lower. Complete 5 reps with a neutral foot, 5 reps with your toe pointed toward the ground and 5 reps with your toe pointed to the sky.

### 3. Donkey Kicks



Start in a table position. Bring one knee as close to your chest as possible, then kick your foot back and try to “hook” your foot over your back. Complete 8 reps on each side.

### 4. Donkey Whips



Start in a table position. Extend your foot behind you without locking your knee. Swing your foot and leg to the side for 5 reps. Repeat on the other side.

### 5. Fire Hydrant



Start in a table position. Lift your leg so that your knee, lower leg and foot are at the same height as your back. Complete 8 reps on each side.

## 6. Knee Circle, Forward



Start in a table position, but with your knees at a 45-degree angle. Lift your leg so that your knee, lower leg and foot are at the same height as your back and make a circular motion with the knee. Complete 5 reps then switch legs.

## 7. Knee Circle, Backward



Start in a table position, but with your knees at a 45-degree angle. Lift your leg so that your knee, lower leg and foot are at the same height as your back. Reach your leg back, then sweep your leg down to make a circular motion with your knee. Complete 5 reps then switch legs.

## 8. Hurdle Trail Leg, Forward



With your hands on the wall or fence, stand on your left foot and pretend that you are skimming your right foot over a hurdle at hip height. Start with 5 reps; you can increase your reps as you gain strength. Repeat on opposite leg.

## 9. Hurdle Trail Leg, Backward



With your hands on the wall or fence, stand on your left foot and drive your right knee up so that your thigh is parallel to the ground. Then move your foot behind you and pretend that you are skimming your right foot over a hurdle at hip height. Start with 5 reps; you can increase your reps as you get stronger. Repeat on opposite leg.

## 10. Lateral Leg Swing



Facing a wall with your feet hip width apart, swing your right leg parallel to the wall. Your foot should reach hip height when you swing it to the right and the height of your left knee when you swing it left. Keep your swing leg straight. Complete 10 reps then switch sides.

## 11. Linear Leg Swing



Stand perpendicular to the wall and swing your right leg in front and behind you. Remember to keep your body tall. Complete 10 reps then switch sides.

## 12. Linear Leg Swing, Bent Knee



Position yourself as if you are going to do a linear leg swing, but with a 90-degree angle at the knee. Swing your leg in front and behind. Complete 10 reps, then switch legs.