



#### What is Iliotibial (IT) Band Syndrome?

The Iliotibial band is a thick stretch of connective tissue that runs down the side of the leg. Used to help stabilize the knee and leg during running, it can become irritated as a result of overuse.

The symptoms of IT Band Syndrome can include: swelling at the knee, pain at the hip or outside of the knee or lower thigh which worsens going down stairs, or increased pain with repeated bending of the knee. Iliotibial band syndrome is best prevented by warming up properly, maintaining hip stability, incremental increases in activity rather than sudden increases and doing stretching exercises before sports or other physical activity.

#### Treatment

Initial treatment includes the following easy to remember acronym, RICE:



Once pain subsides with walking, begin the following exercises:

#### 1. Iliotibial Band Stretch (standing)

Cross your uninjured leg over your injured leg and bend down to touch your toes. Hold this position for 30 seconds. Come back up to the starting position. Repeat 3 times.



#### 2. Iliotibial Band Stretch (side leaning)

Stand sideways to a wall, your injured leg toward the outside. Place the hand nearest the wall on the wall for support. Cross your uninjured leg over the injured leg, keeping the foot of the injured leg stable. Lean into the wall. Hold the stretch for 30 seconds and repeat 3 times.







#### 3. Hamstring Stretch

Lie on your back and bring affected leg towards your chest. Grab the back of your thigh and try to extend your leg. Hold this position for 30 to 60 seconds, feeling a stretch in the back of your thigh. Repeat three times. You may also try this with a towel around your foot if it is more comfortable.





#### 4. Quadriceps Stretch

Stand sideways to a wall, about an arm's length away from the wall, with your injured leg towards the outside. Facing straight ahead, keep the hand nearest the wall against the wall for support. With your other hand, grasp the ankle of your injured leg and pull your heel up toward your buttocks. Do not arch or twist your back.

Hold this position for 30 seconds. Repeat 3 times.

This may also be done while laying on the opposite side and grasping the ankle of the affected leg. Do not arch or twist your back. Hold this position for 30 seconds. Repeat 3 times.

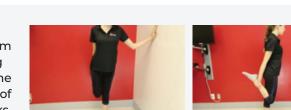
#### **Alternative Quadriceps Stretch**

Place affected leg on a sturdy chair or low stool, and place opposite hand on a wall to the side of you. Slowly bend front leg, hold for 30 seconds, repeat 3 times.

#### 5. Gluteal Stretch

Sit with left leg straight out in front of you, cross your bent right leg over the knee of your left leg. Place your elbow over your right knee and twist slightly until you feel a stretch in the back of your thigh and gluteal muscle. Hold for 30 seconds. Repeat 3 times. You may also try simply bringing a bent leg to your chest and holding.











#### 6. Vastus Medialis Oblique Quadriceps Sets

Sit on the floor with your injured leg straight in front of you. Press the back of your knee down while tightening the muscles on the top of your thigh. Concentrate on tightening the muscles on the inner side of your kneecap. Hold this position for 5 seconds. Complete 3 sets of 10.

# 2

#### 7. Straight Leg Raise

Sit on the floor with the injured leg straight and the other leg bent, foot flat on the floor. Pull the toes of your injured leg toward you as far as you can, while pressing the back of your knee down and tightening the muscles on the top of your thigh. Raise your leg six to eight inches off the floor and hold for 5 seconds. Slowly lower it back to the floor. Complete 3 sets of 10.

#### 8. Side Leg Lifts: Abduction

Lie on your uninjured side and place leaning on the elbow of your uninjured side and using the arm of the injured side in front of you to stabilize your body. Slowly with the injured leg up, hold for 5 seconds then lower slowly. Be sure to keep your hips steady and don't roll forwards or backwards. Complete 3 sets of 10.

#### Adduction

Lie on your injured side with your top leg bent and flat foot placed in front of the injured leg, which is kept straight. Raise your injured legas far as you can comfortably and hold it there for 5 seconds. Keep your hips still while you are lifting your leg. Hold this position for 5 seconds, and then slowly lower your leg. Complete 3 sets of 10.

#### 9. Clamshells

Lie on your side with your knees slightly bent, keeping your legs and ankles together. Open and close your knees like a clam by lifting your top knee up until its parallel with your hip. Keep your feet together throughout the exercise, move slowly and controlled as if someone is pushing against your knee while you are pressing it up. Complete 3 sets of 10.

















#### **10. Standing Marching**

This exercise should look like an exaggerated upright running position. Begin with one arm bent in front of you and the other bent behind you, and one leg bend in front of you. The opposite arm and leg should be in front. Slowly switch legs and arms. Try to keep your hips steady as you do this. Repeat. Try to get to 100 total marches.



### ADVANCED EXERCISES: Only attempt these exercises if the you can complete the other exercises with no pain.

#### 11. Wall Squat

Stand with your back, shoulders, and head against a wall and look straight ahead. Keep your shoulders relaxed and your feet one foot away from the wall, shoulder width apart. Keeping your head against the wall, slowly squat. Do not let your knees fan inwards or outwards. Squat down until your thighs are parallel to the floor.

Hold this position for 10 seconds.

#### 12. Hip Hikes

Stand with injured leg on a step while holding onto wall. Let you opposite hip drop down slightly then raise it slowly. Complete 3 sets of 10.

Slowly stand back up. Complete 3 sets of 10.

#### 13. Single Leg Swing Through

Stand on affected leg with knee slightly bent and chest slight forward with opposite arm in front and opposite leg in back. Swing opposite leg through to front while standing upright and switch arms. This should look like an exaggerated running position. Complete 3 sets of 10.







#### When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon, you may worsen your injury, which could lead to permanent damage. Everyone recovers at a different rate.

Returning to your sport or activity will be determined by how soon your ankle recovers, not by how many days or weeks it has been since your injury has occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may safely return to your sport or activity when, starting from the top of the list and progressing to the end, each of the following is true:

- You have full range of motion in the injured ankle, compared to the uninjured ankle
- You have full strength of the injured ankle compared to the uninjured ankle and are able to complete the above exercises without pain
- You can jog straight ahead without pain or limping
- You can sprint straight ahead without pain or limping
- You can jump on both legs without pain, and you can jump on the injured leg without pain

Return to your sport at about 50% effort, and increase by about 10% each week. If you begin with pain, you may need to rest for a few days before returning to activities.