A GUIDE TO

ILIOTIBIAL BAND SYNDROME

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What is iliotibial band syndrome?
Iliotibial band syndrome is inflammation and pain on the outer side of the knee. The iliotibial band is a layer of connective tissue. It begins at a muscle near the outer side of your hip, travels down the outer side of your thigh, crosses the outer side of the knee, and attaches to the outer side of your upper shin bone (tibia).

How does it occur?
Iliotibial band syndrome occurs when this band repeatedly rubs over the bump of the thigh bone (femur) near the knee, causing the band to be irritated. This most often occurs in running.

This condition can result from:

- Having a tight iliotibial band
- Having tight muscles in your hip, pelvis, or leg
- Your legs not being the same length
- Running on sloped surfaces
- Running in shoes with a lot of wear on the outside of the heel
- Running with shoes that are too old

What are the symptoms?
The symptom is pain on the outer side of the knee.

How is it diagnosed?
Your doctor will examine your knee and find tenderness where the band passes over the bump on the outer side of your knee. Your iliotibial band may be tight.

How is it treated?
Treatment includes the following:

- Place an ice pack over your iliotibial band for 20 to 30 minutes every 3 or 4 hours for 2 to 3 days or until the pain goes away.
- You can also do ice massage. Massage your knee with ice by freezing water in a Styrofoam sup. Peel the top of the cup away to expose the ice and hold onto the bottom of the cup while you rub ice over your knee for 5 to 10 minutes.
- Take an anti-inflammatory medication, according to your doctor's prescription.
- Do the stretching exercises recommended by your doctor or physical therapist.

Your doctor may give you an injection of a corticosteroid medication to reduce the inflammation and pain.

While your knee is healing, you will need to change your sport or activity to one that does not make your condition worse. For example, you may need to bicycle instead of run.

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 from injury at a different rate. Return to your sport or activity will be determined by how soon your knee recovers, not by how many days or weeks it has been since your injury 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:

- Your injured knee can be fully straightened and bent without pain.
- Your knee and leg have regained normal strength compared to the uninjured knee and leg.
- You are able to jog straight ahead without limping.
- You are able to sprint straight ahead without limping.
- You are able to do 45-degree cuts.
- You are able to do 90-degree cuts.
- You are able to do 20-yard figure-of-eight runs.
- You are able to jump on both legs without pain and jump on the injured leg without pain.

How can I prevent iliotibial band syndrome?
Iliotibial band syndrome is best prevented by warming up properly and doing stretching exercises before sports or other physical activity.

You may do stretching exercises 1 through 5 and strengthening exercises 6 through 10 right away

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 up to the starting position. Repeat 3 times.

2. Iliotibial band stretch (side-learning): Stand sideways to a wall, your injured leg toward the inside. Place the hand nearest the wall on the wall for support. Cross your uninjured leg over the injured leg, keeping the foot the injured leg stable. Lean into the wall. Hold the stretch for 30 seconds and repeat. Do 2 sets of 3-5.

3. Standing calf stretch: face a wall and put your hands against the wall at about eye level. Keep your injured leg back, your uninjured leg forward, and the heel of your injured leg on the floor. Turn the foot on your injured leg slightly inward (as if you were pigeon-toed) as you slowly lean into the wall until you feel a stretch in the back of your calf. Hold for 30 seconds. Do this several times a day.

4. Hamstring stretch: Lie on ;your back with your buttocks close to a doorway and extend your legs straight out in front of you. Raise your injured leg and rest it against the wall next to the door frame. Hold this position for 30 to 60 seconds, feeling s stretch in the back of your thigh. Repeat 3 times.

5. Quadriceps stretch: Stand sideways to a wall, about an arm’s length away from the wall, your injured leg toward 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. Don't arch or twist your back. Hold this position for 30 seconds. Repeat 3 times.

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. Repeat 20 times.

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 6 to 8 inches off the floor and hold for 5 seconds. Slowly lower it back to the floor. Repeat this 20 times.

8. Hip adduction, sidelying: Lie on your injured side with your top leg bent and that foot placed in front of the injured leg, which should be kept straight. Raise your injured leg as far as you can comfortably and hold it 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. Repeat 20 times.

9. Wall squat with a ball: Stand with your back, shoulders, and head against a wall and look straight ahead. Keep your shoulders relaxed and your feet 2 foot away from the wall and a shoulder's width apart. Place a rolled up pillow or a Nerf ball between your thighs. Keeping your head against the wall, slowly squat while squeezing the pillow or ball at the same time. Squat down until you are almost in a sitting position. Your thighs will not yet be parallel to the floor. Hold this position for 10 seconds. Slowly stand back up. Make sure you keep squeezing the pillow or ball throughout this exercise. Repeat 20 times.

10. Hip adduction with Thera-Band: Stand sideways with your injured leg toward a door. Loop the tubing by tying a knot in the tubing, slipping it between the door and the frame about 8 to 10 inches above the floor, and closing the door. Keeping your injured knee straight, bring your injured leg across your body. Return to the starting position. Repeat 20 times.