



Iliotibial Band Syndrome Protocol

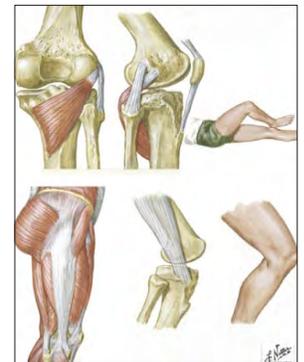
Treatment includes activity modification, stretching, and strengthening the affected limb. Immediately begin using:

P Protection	R Rest	I Ice	C Compression	E Elevation
Consider using a knee immobilizer for the first 1–2 days if painful when walking.	You should rest from all activities that cause pain or limping. Consider using crutches until you can walk without pain or limping.	Place an ice bag on the distal knee, or proximal hip (wherever painful) for 15–20 minutes, or use an ice bath if available 3–5 times a day for the first 24–72 hours.	Wrap an elastic bandage from mid-calf to mid-thigh, using even pressure. Wear this if swelling is noticed until it decreases.	Make sure to elevate the knee above heart level until swelling subsides. Always be sure to ice your knee down after you complete your exercises using either immersion in ice bath, or wrapping a bag of ice. Apply for 20 minutes.

Iliotibial band syndrome (ITBS) is the result of inflammation and irritation of the distal portion of the iliotibial tendon (see illustration) as it rubs against the bursa that lies underneath the tendon and lateral femoral condyle (outer part of the thigh bone at the knee), or less commonly, the greater tuberosity (outer part of the thigh bone at the hip). This overuse injury occurs with repetitive flexion (bending) and extension (straightening) of the knee. This could also occur because of a lack of flexibility of the ITB, which can result in an increase in tension on the ITB during activity.

When experiencing these problems with your knee, it's important to find ways not to keep it irritated. Occasionally, the injuries start with a clear-cut onset, like stepping in a hole or falling on your knee. Usually though it feels like it comes out of nowhere. This means that you've been gradually creating the injury over a longer period of time like a few days or weeks. Something that you do during the day sets it off, but it's commonly very hard to figure out what exactly is the aggravating activity. Nonetheless, you've overdone it. Try not to worry if you can't figure out exactly why your knee got sore. That may not be necessary to determine in order to get better.

The more often you make your knee sore, the longer it will take to get better. The inflammation seldom builds up to a level where it keeps you in bed, so it's tempting to keep up and about on it. This may keep it stirred up. Try to avoid all the activities that make it sore, i.e., sitting with your knee bent for a long time, walking a lot, going up and down stairs, or exercising. While it doesn't cause more damage, it does keep the inflammation from going away. You may find it helpful to sit with your knee straight or get up and move around occasionally. Also, try stairs one step at a time using your uninjured leg. These knee injuries can be very stubborn before they get better. The sooner you stop aggravating it, the sooner you can get back to the activities you like.



From Netter's Sports Medicine

The first phase of exercising begins with these stretches:

Quadriceps stretch

Using a towel, or band, lie on your stomach, attach the band to affected foot, and pull your heel to your butt. Hold this stretch for 1 minute. Repeat 3 times.



Hip flexor stretch

Kneel with affected knee on the ground, same side arm goes back causing pelvis (hips) to shift forward, and back to extend. Hold for 20–30 seconds. Repeat 3 times.



Abductor stretch

Prop the inside of your ankle up on a table, lean into the side you're stretching. Hold for 20–30 seconds. Repeat 3 times.



Hamstring stretch

Prop the back of your heel up on a table, keep your back straight, and lean forward at the hips. Hold for 20–30 seconds. Repeat 3 times.



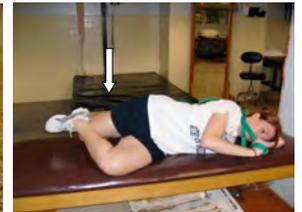
Dynamic hamstring stretch

Lie on your back, reach hands behind your knee, keep knee at 90-degree angle, and kick up until you feel stretch. Repeat 15–20 times each side.



Sidelying ITBand stretch

On your side, using a towel or band, pull foot back as if stretching quadriceps, and use the opposite foot to push down on distal part of leg. Hold this stretch for 1 minute. Repeat as needed



C stretch for ITBand

Standing, place affected leg behind the good leg, and lean away. Hold for 20–30 seconds. Repeat 3 times.



Glute stretch

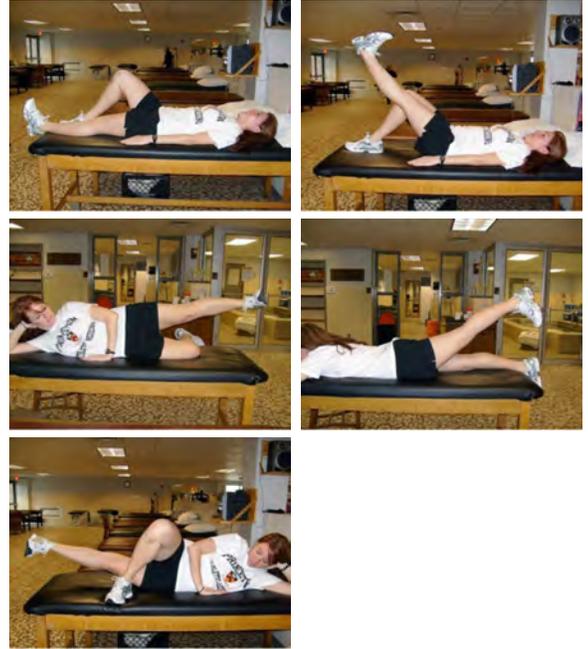
Prop the outside of your ankle up on a table, make sure leg is at 90 degrees, keep your back straight, and lean forward at the hips. Hold for 20–30 seconds. Repeat 3 times.



Begin these strengthening exercises once you have completed and feel comfortable with the stretching protocol:

Straight leg raises in all 4 directions

Lie on your back, bring your foot toward you so quadriceps muscle is contracted and knee is straight, raise leg up toward ceiling into hip flexion. Repeat this on your side for hip abduction, opposite side for hip adduction, and on your stomach for hip extension. Do 3 sets of 15 in each direction. As this gets easier, you can add weight, or add repetitions.



Hip abduction with foot externally rotated

On your side, with knee straight (quadriceps contracted), raise your leg into hip abduction with leg slightly back, and point your foot towards the ceiling. Do 2 sets of 15.



Fire hydrant position

On your side, flex hip, and bend knee to 90 degrees, then lift leg upward towards ceiling. Do 2 sets of 20.



Hip circles

On your side, with knee straight (quadriceps contracted), complete 20 circles to the right, and 20 circles to the left.



Standing squat with hip abduction

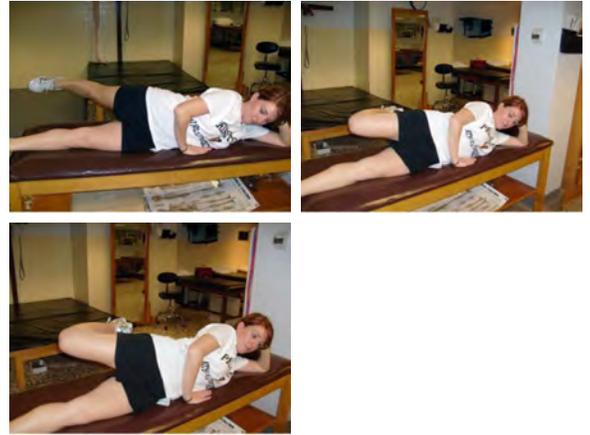
Begin with a standing squat and add leg lift out to the side. Do 3 sets of 10.



Begin these functional exercises when you have successfully completed and feel comfortable with the strengthening exercises:

Sidelying bicycle

On your side, flex hip with knee bent, extend knee, and bring hip into extension. Repeat 5 times. On your side, extend hip with knee straight, bend knee, and bring hip into flexion. Repeat 5 times.



Standing hip abduction/adduction on box

Standing on a box, with affected leg off the end, bring leg out while pointing toe, and bring leg in while flexing foot. Do 3 sets of 15.



Alternating lunges

Standing, lunge forward alternating right and left leg.

