

ILIOTIBIAL BAND SYNDROME

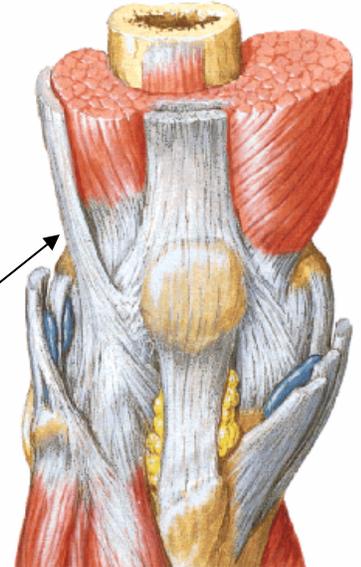
◆ What is it?

The iliotibial band is the tendon attachment of hip muscles into the upper leg (tibia) just below and on the outer portion of the knee. There is also a bursa (fluid-filled sac) underneath the tendon as it passes over the bony bump on the outer side of the knee (lateral femoral condyle). The bursa functions like a water balloon to reduce friction and wear of the tendon against the bony bump. In this condition, overuse causes excessive friction at this bump, resulting in inflammation and pain of the bursa (bursitis), tendon (tendinitis), or both.

◆ Signs and Symptoms of this Condition

- Pain, tenderness, swelling, and sometimes crepitus (clicking or crackling sound) over the iliotibial band as it passes over the outer knee
- Pain reproduced with running, ascending or descending stairs, and possibly biking
- Focal pain to press on the outer side of the knee over the iliotibial band just above the joint line (where the knee bends)

Iliotibial Band
(outer knee)



◆ Causes

Iliotibial band syndrome is caused by excessive friction of the iliotibial band and the underlying bursa due to repetitive knee-bending activities. This is normally an overuse injury. The following factors may contribute to the development of this condition:

- Excessive running (too far, too frequently without sufficient rest periods between bouts of running, sudden increases in running mileage/duration/frequency)
- Running in running shoes that are worn-out (replace running shoes every 500 miles)
- Running on sloped or banked surfaces (side of a road) or downhill
- Having a tight iliotibial band and/or hamstring and calf muscles

◆ What Can I do to Prevent Iliotibial Band Syndrome?

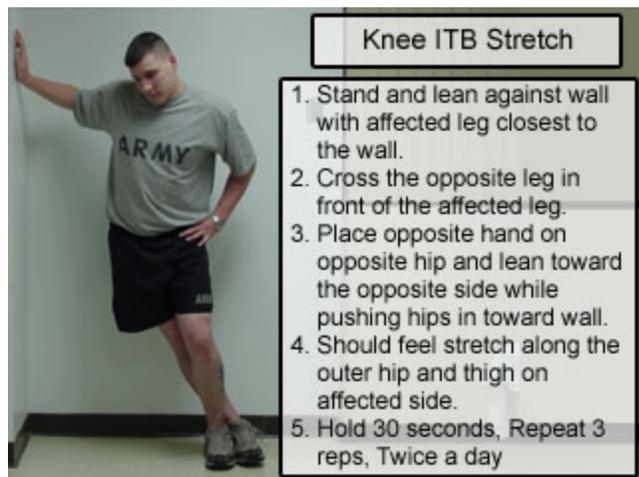
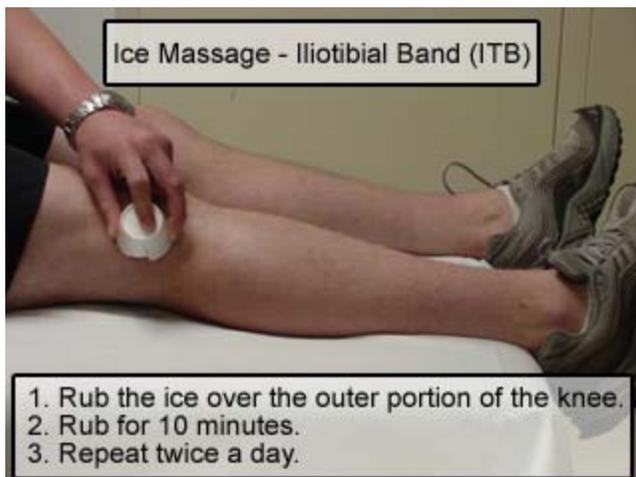
- Train properly (slowly progress running mileage, avoid running every day to ensure adequate recovery, avoid running hills and on side sloped / banked surfaces)
- Change running shoes out every 500 miles (every 6-9 months for many average runners)
- Warm-up and stretch well before running (iliotibial band, calf, hamstrings, quadriceps)

◆ Prognosis

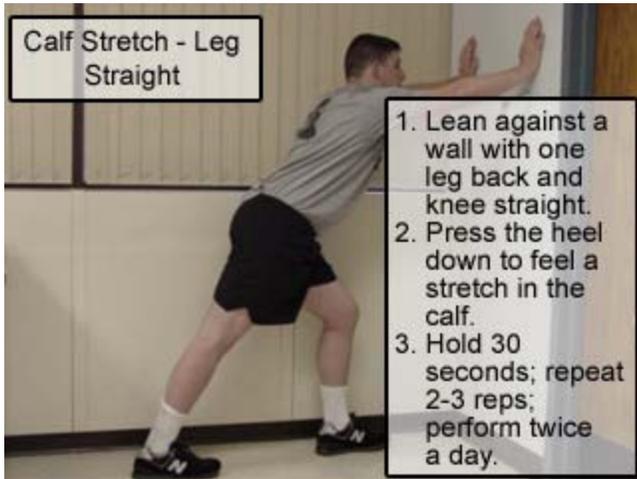
Iliotibial band syndrome will normally resolve in 6-8 weeks given sufficient rest from running and other contributing factors, daily ice treatment, and stretching. It will not improve by continuing to run or work through the pain while continuing to run. Anti-inflammatory medication can also help in resolving this condition.

◆ Treatment

- Rest – NO running, biking, stair machine for exercise.
- Ice massage over the iliotibial band 10 minutes 1-2 times per day. (Ice massage is performed by filling paper or foam cups with water and freezing them. Take the frozen cup and tear off the outer edge of the cup near the lip to expose the ice. Hold the cup with one hand and place the ice portion so that it is in contact with the injured/painful area and rub in circles over the painful area).
- Anti-inflammatory medication (aspirin, ibuprofen, etc) may be helpful in reducing both pain and inflammation.
- Iliotibial band, calf, hamstring, and quadriceps stretching (hold each stretch 30 seconds, repeat 2-3 repetitions, 2 times per day).
- Change to a new pair of running shoes if indicated.
- SLOWLY progress back into jogging by alternating between walking and jogging every other day with a gradual increase in jogging distance and decrease in walking distance until performing straight jogging.



Calf Stretch - Leg Straight



1. Lean against a wall with one leg back and knee straight.
2. Press the heel down to feel a stretch in the calf.
3. Hold 30 seconds; repeat 2-3 reps; perform twice a day.

Hamstring Stretch



1. Rest your foot on a solid object.
2. Keep your knee completely straight and lean forward.
3. Feel a stretch in the back of your thigh.
4. Hold 30 seconds; Repeat 2-3 times; Twice a day.

Quadriceps Stretch



1. Standing, pull your foot to your hip.
2. Feel a stretch in the front of your thigh.
3. Hold 30 seconds.
4. Repeat 2-3 reps.
5. Perform twice per day.