

RunSMART[®]: Iliotibial Band Syndrome (Runner's Knee)

General Information

The following recommendations are appropriate if you are healthy and cleared to run by your health care provider.

Iliotibial Band (ITB) Syndrome

Iliotibial band (ITB) syndrome is strong pain found on the outside of your knee. This is the most common cause of knee pain in runners. It is a common overuse injury in bicyclists, runners and long-distance walkers.

The ITB is a long tendon that attaches to a short muscle at the top of your pelvis. It runs down the side of the thigh and connects to the outside edge of the tibia (shin bone), just below the middle of your knee joint. The ITB crosses over the side of the knee joint, giving added stability to your knee. You can feel the tendon on the outside of your thigh when you tighten your leg muscles.

When you bend and straighten your knee, a bursa (a fluid-filled sac) lets the ITB glide smoothly back and forth over the edge of the femoral condyle (a projection on the lower thigh on the outer side of the leg where the ITB inserts at the knee). If the ITB becomes irritated, it may cause increased pain on the outside of your knee just above the joint.

Causes

ITB syndrome may be caused by any of the following:

- repeated knee motions such as biking, walking or running
- pushing yourself too hard or increasing distance too quickly (more than 10 percent each week)
- too much downhill running
- running on hard surfaces
- running on slanted roads or surfaces
- poor warm-up or cool-down
- wearing shoes that are worn out on the outer edges which causes your legs to bow outward
- pronated or flat feet
- high-arched feet, which leads to increased stress on the outer part of your leg
- weak muscles on the outside of the hip or buttock.

Symptoms

Common symptoms include:

- pain that spreads over the outside of the knee
 - The pain becomes sharp as the ITB becomes more irritated.
 - The pain often starts as an ache or tightness.

- You may have pain during the first few minutes and at the end of a run.
- It is common for the pain to start at a certain time or mileage during a run and continue until you stop.
- pain when running down a hill, lengthening your stride, sitting with your knees bent for extended periods of time, squatting or going down stairs
- a snapping or popping sensation on the outside of the knee

Sometimes, symptoms may get better with a faster pace.

Diagnosis

A diagnosis is made with a physical exam and reviewing your health history. Your health care provider will do special tests that check for tenderness, flexibility and muscle strength. They will also check your gait analysis and foot position.

Treatment

In most cases, ITB syndrome can be treated with simple, basic measures. Your health care provider may recommend a number of treatments. These may include:

- taking nonsteroidal anti-inflammatory drugs (NSAIDs) to relieve pain and inflammation
- ice massage to the area
- using a foam roller on the affected area for 3 to 5 minutes to help reduce tension
- getting a professional shoe wear assessment to make sure your shoes have the right support
- avoiding activities or exercises that could make pain worse
- alternating between the sides of the road that you run on, if it is safe to do so

■ ITB stretch

- While standing, cross your right leg behind your left leg.
- Extend your left arm against a stable object such as a wall or a chair.
- Lean your weight against the object while pushing your hip in the opposite direction.
- Keep your right foot anchored while allowing your left knee to flex. You should feel a stretch in the ITB in your right hip and along the outside of the right thigh.
- Hold for 30 seconds. Relax slowly.
- Repeat with the left side.

■ stretching well before running

If you run on an outdoor track, do your warm-up and cool-down in the outer lane in the opposite direction of your workout.

A physical therapist can suggest a training schedule for your activities to help prevent further injury.

Training

There are options to maintain training without continued stress to the ITB. These include:

- swimming
- pool running
- cycling in low gear.

Do not do any exercise that places a strain on the ITB, especially stair climbing.