

ILIOTIBIAL BAND SYNDROME

Prevention and Treatment of a Common Runner's Injury

Iliotibial band (ITB) syndrome is a common overuse injury that occurs in runners and in athletes whose sports involve extensive running or lower extremity movement. Iliotibial band syndrome is defined as the inflammation of the ITB where it inserts onto the outside portion of the lower knee. The ITB is a thick band of connective tissue that originates on the ilium of the pelvis, runs along the outside of the thigh, and inserts onto the lateral aspect of the tibia just below the knee joint.

Symptoms

ITB pain very rarely comes from one specific injury. Instead, it is usually caused by continuous overuse. Pain usually occurs at the insertion of the ITB on the outside of the lower knee. This condition can be associated with hip bursitis--the pain is felt on the outside of the hip. This is technically known as greater trochanteric bursitis.

Causes of Injury

ITB Syndrome is caused by repetitive friction between the ITB and the outside joint line of the knee. This occurs during repeated flexion and extension of the knee during which the ITB moves back and forth across the bones of the femur and tibia. The following are considerations that can contribute to ITB syndrome:

1. Thigh and Hip muscle tightness
2. ITB tightness
3. Inadequate warm-up and stretching
4. Abnormal pronation of foot
5. Genu Varum of the knees ("Bowlegs" or "Cowboy" legs)
6. Running on uneven or banked surfaces

Treatment

ITB syndrome is usually the result of multiple problems. It is for this reason that you should treat your injury using a combination of methods. Look for recent changes in your training that may be contributing to your problem. Sudden increases in training, mileage, hill training, or changes in running surfaces can cause added stress on the lower extremities. This sudden increase combined with tight hip and thigh muscles, a tight ITB, or excessively pronated feet may be enough to cause a flare up of this syndrome. To address this problem, begin by reducing training mileage and intensity. Be sure to use pain as your guide - don't exercise with pain! Substitute pain-free activities for those activities that cause your pain. If you are a runner you may consider riding a bike or swimming. If you run on asphalt or concrete you may want to change to a rubberized running surface such as a track. If you run on a track or banked surface you should alternate the direction run every other day. This will help to divide the stress evenly between both legs.

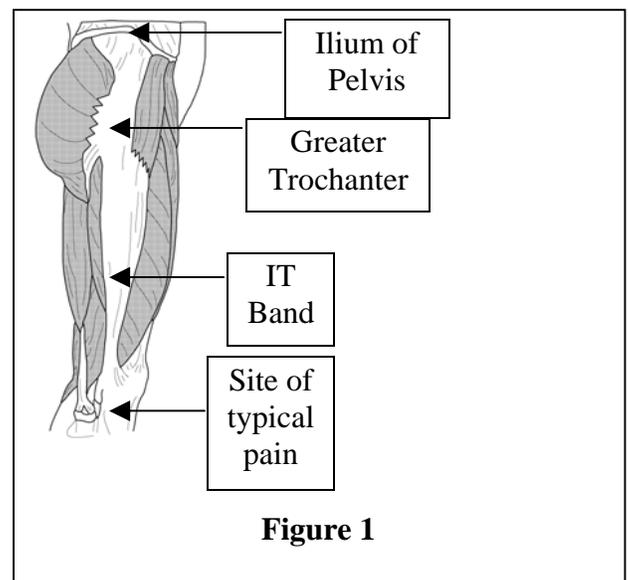


Figure 1

Warming up properly before you exercise will also help. Your warm-up should include 5 - 10 minutes of light activity such as a stationary bike, light jog, or fast walking. This activity should be just intense enough to cause a light sweat. Follow this with some light stretching to include the ITB, hamstrings, quadriceps, hip flexors, and calf muscles. Stretching is most effective when performed 2-3 times and held for 30 seconds. It is recommended that stretching be performed before, and especially after an activity. Stretching before going to sleep at night is very effective and helps to reduce tension.

Athletes who have postural or biomechanical problems may benefit from the use of custom orthotics. Orthotics are custom shoe inserts that are used to correct the movement of your feet when you walk or run. They function to relieve abnormal stress on the lower extremity provided by faulty foot mechanics.

It is important to ice the affected area 2 -3 times per day to reduce the inflammation in the ITB which is a source of pain. A gentle ice massage for 10 minutes works well to accomplish this reduction in inflammation. Ice cups can be easily made by filling Styrofoam cups with water, freezing them, and then tearing off the lip of the cup when ready to use in order to expose the ice. The cup enables you to protect your hand from the cold as you apply the ice to the affected area.

Over-the-counter anti-inflammatory medications such as Alleve, Motrin, Ibuprofen, aspirin, etc may help to reduce swelling and inflammation. ALWAYS check with your doctor before self-medicating to ensure that it is okay for you to use them.

If the problem persists despite your intervention, consult your physician, physical therapist, or athletic trainer for advice.

If you would like more information about rehabilitation, exercise, care and prevention of iliotibial band syndrome, or if you would like more information about any other condition, please contact us at 1-800-645-KORT, or at www.kort.com, for the location of the nearest KORT facility to you.



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