

**Hello Runners! This is a good article adapted from the website for Nicholas Institute of Sports Medicine and Athletic Trauma. It addresses one of the most common running injuries. I give this to my patients who are runners-enjoy!**

## **Iliotibial Band Friction Syndrome Treatment**

It is a condition characterized by pain localized over the lateral femoral epicondyle that occurs during vigorous walking, hiking or running. The pain is usually relieved by rest and by walking with the knee held in full extension. However, when ambulation and knee flexion are resumed, symptoms return.

**What is the iliotibial band (ITB)?** The iliotibial band is a tendinous extension of the fascia covering the gluteus maximus and tensor fascia latae muscles proximally. It descends distally to attach to the lateral condyle of the tibia. It also sends fibers to the lateral aspect of the patella (knee cap). Essentially, the ITB is the linkage between the pelvis, upper leg, and lower leg. Pathology to any structure linked to one of these areas may cause ITB contracture.

**What is a possible cause of iliotibial band friction syndrome?** Overuse may cause shortening of the ITB. The knee goes from flexion to extension and excessive pressure from the ITB causes friction over the lateral femoral epicondyle. This repeated motion produces inflammation of the underlying structures and causes pain.

### **What are the facts concerning iliotibial band friction syndrome?**

- Pain localized over lateral femoral condyle
- Discomfort initially relieved by rest
- Pain may radiate toward the lateral joint line and proximal tibia
- Worse if a person continues to run
- Symptoms frequently develop during downhill running
- Inadequate stretching program

### **Which anatomic factors may be associated with iliotibial band friction syndrome?**

- Hip abduction contracture (ITB tightness)
- Genu varum (Bow legging)
- Heel and foot pronation
- Tight heel cords
- Internal tibial torsion (Inward rotation of the leg)

### **What are the treatments of iliotibial band friction syndrome?**

- Rest
- Ice
- Stretching of iliotibial band
- Avoid hills, shorten stride, and run on alternate sides of road
- Physical Therapy hands on treatment
- Anti-inflammatory medicine
- Orthotics (if appropriate)
- Ultrasound
- Contrast baths
- Local steroid injection

### **Stretching techniques**

1. *Starting position:* Upright standing.  
*Action:* Cross involved leg behind uninvolved leg in standing



position, with a stretched leg behind, and lean to the uninvolved side until a stretch is felt over outside of involved hip.

2. *Starting position:* Lying on your back with arms to the sides.

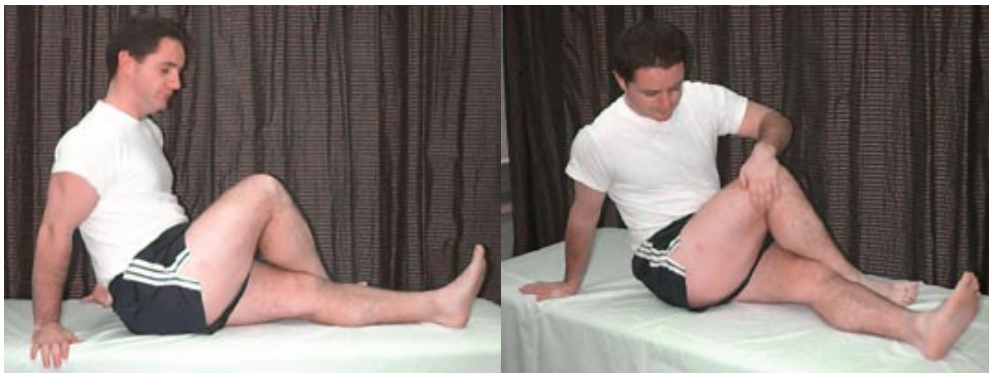
*Action:* Lift your involved leg over the other leg placing your opposite hand on the back of the stretched thigh. Keep your arm on the involved side extended out to the side and both shoulders flat. If possible, try to straighten the knee of your stretched leg to accentuate the stretch.



3. *Starting position:* Sit comfortably with your legs out in front of you.

*Action:* Put the foot of the involved knee flat on the ground on the outside of the other straight leg. Reach over your stretched leg with your opposite arm, so that your elbow is on the outside of your stretched thigh. Slowly turn your head and look over your stretched side shoulder, at the same time, turn your upper body toward the same side. Keep your hips flat on the floor at all times.

*Note:* If you do not feel the stretch, bend your opposite knee, placing the foot next to your stretched hip.



4. *Starting position:* Lying on your back with your legs straight.

*Action:* Bend the knee of the involved limb, and while holding it with your both hands, pull it toward your chest and to the opposite shoulder.



Hope this info helps, if you have any questions or needs for physical therapy, feel free to call me at 541-776-2333, or email at [justincarson@hotmail.com](mailto:justincarson@hotmail.com). Thanks! Justin Carson DPT, CSCS, Jackson County PT-Medford Clinic