

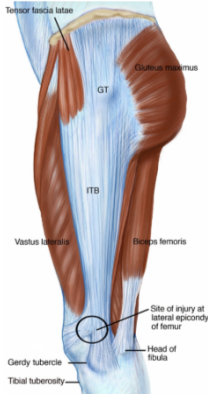
# Iliotibial Band Syndrome

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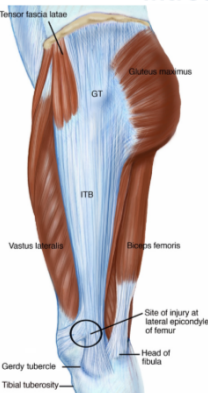
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## Introduction



- Pain in the region of the lateral femur condyle or slightly inferior
- It occurs after repetitive motion of the knee (runner, cyclist, triathlete, etc.)
- Diagnosis is made based in a combination on the case history and physical examination

## Introduction



- Local tenderness of the lateral knee inferior to the epicondyle and superior to the joint line.
- Ober test for distensibility of the iliotibial band is also a measurement of interest
- Can mimic lateral meniscus tear

## Pathology

### Friction?

- Repetitive shift forward and backward of iliotibial band over the lateral condyle
- This view has been called into question by Fairclough J et al (J Sci Med Sport 2007)
- ITB is NOT a distinct anatomical structure but merely a thickened zone within the lateral fascia

## Pathology (Fairclough J et al J Sci Med Sport 2007)

- It is impossible that the anterior-posterior glide: friction syndrome cannot exist!
- An illusion of the anterior-posterior movement of ITB results from repetitive cycles of tightening with compression on connective tissues lying deep to the Band
- Fat pad impingement? (Barker JU, SportsHealth 2011)

## Pathology

- Hariri S et al (Am J Sports Med 2009) calls into question whether inflammation of ITB is actually involved.

IT MAY BE TWO DIFFERENT SUBTYPES:

1. Involvement of cyst, bursa or lateral synovial recess
2. Compression of underlying connective tissues

### Biomechanical factors

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- **Weak hip abductors?**
  - Some authors did not find abductor weakness
- **Tight Iliotibial band?**
  - No study to date correlate Ober test with ITBS
  - Ober test may be not sensitive enough
  - Hamil J et al (Clin Biomech 2008) “Looser ITBS”: Could ITBS stretching accentuate symptoms?
- **Lower limb mal-alignments**
  - Leg length discrepancy
  - High knee Q angles



### Biomechanical factors

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- **Angle of knee flexion during stance phase?**
  - ITB most likely to rub or compress at 20-30° of knee flexion.
  - Deterioration of knee flexion angle with fatigue. Increased angle of flexion in runners with ITB. (Miller R, Gait posture 2007)
  - No difference of knee flexion between runners with or without ITBS (Orchard J, Am J Sports Med 1996)
- **Rear-foot eversion?**

### Treatment (Levine R, Curr Rev Musculoskelet Med 2010)

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- Anti-inflammatories?
- Stretching?
  - ITB, Gluteal muscles
  - No studies documenting a link between ITB distension and improved running biomechanics or symptoms relief
- Connective tissue manipulation?
  - Scarce published data has tested the efficacy of this treatment.
- Strengthening of hip abductors?
  - Though not trials have been published on the efficacy of strengthening hip abductors exercises, still are often recommended.
- Improved neuromuscular coordination?
- Surgical excision of cyst, bursa, lateral synovial recess?

THANK YOU, MERÇİ  
SHUKRAM, GRACIAS

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