

Iliotibial Band Syndrome (ITBS)

Pain, irritation, and inflammation due to friction between the IT band and other structures during lower extremity movements involving knee flexion and extension. ITBS is common with overuse activities.

Structures Involved:

- IT band
- Gluteus Maximus, gluteus medius, gluteus minimus
- Tensor fascia latae (TFL)
- Greater trochanter
- Lateral femoral condyle
- Bursa (between ITB & lateral femoral condyle or greater trochanter)



Related Findings

- Lateral knee pain
- Lateral knee swelling
- IT band "snapping" over knee when flexing/extending
- Pain/tightness over lateral hip
- Hip and core muscle weakness



Risk Factors

- Running
- Cycling
- Repetitive squatting or kneeling
- Extensive time spent in a specific position (sitting or standing at work)
- Change in exercise regimen
- Knee valgus
- Excessive hip internal rotation
- Posture consisting of anterior pelvic tilt and excessive hip flexion
- Gluteal weakness



Outcome Measures

Patient-reported Outcome Measures

- LEFS
- NPRS

Functional Outcome Measures

- Single Leg Mini Squat (SLMS)
- Y Balance Test (YBT)

Differential Diagnosis

<u>Greater Trochanteric Pain Syndrome (GTPS)</u> - Lateral hip pain, specifically over the greater trochanter; pain increases with weightbearing and side-lying; 'jump sign' with palpation over the greater trochanter; weak hip abductor muscles; pain with 30 seconds of single leg stance.

<u>Lateral Collateral Ligament (LCL) Injury</u> - localized posterolateral knee pain, swelling, (+) Varus stress test indicating increased laxity. It may be found in conjunction with ACL injury.

ITBS References:

- Bishop BN, Greenstein J, Etnoyer-Slaski JL, Sterling H, Topp R. Electromyographic Analysis of Gluteus Maximus, Gluteus Medius, and Tensor Fascia Latae During Therapeutic Exercises With and Without Elastic Resistance. *Int J Sports Phys Ther*. 2018;13(4):668-675.
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- Hutchinson LA, Lichtwark GA, Willy RW, Kelly LA. The Iliotibial Band: A Complex Structure with Versatile Functions. *Sports Med.* 2022;52(5):995-1008. doi:10.1007/s40279-021-01634-3
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