

Iliotibial Band Syndrome: What Does the Evidence Show?

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Introduction

Iliotibial band syndrome (ITB) is a common running injury. The ITB runs along the lateral or outside aspect of the thigh and is an important structure that stabilizes the outside of the knee as it flexes and extend. The pathway of ITB is caused by excessive friction and impingement on the lateral femoral epicondyle at approximately 20-30° of knee flexion [1-3].

Factors such as leg length differences and increased prominence of the lateral epicondyles have also been noted as possible non-modifiable factors associated with ITB, and factors such as reduced flexibility, excessive pronation, high weekly mileage; time spent walking or running on a track; interval training and muscle weakness of the hip abductor muscles may also be associated with ITB [4-6].

Typically a diagnosis is based on the case history and physical examination is local tenderness of the lateral knee inferior to the epicondyle and superior to the joint line. The Ober test for distensibility of the iliotibial band is also frequently a measurement of interest, though in some cases magnetic resonance imaging or computed tomography might be indicated to rule out another disorder in the region [7-9].

Aderem and colleagues reported 13 studies were included (prospective (n = 1), cross-sectional (n = 12). Female shod runners who went onto developing ITB presented with increased peak hip adduction and increased peak knee internal rotation during stance. Female shod runners with ITB presented with increased: peak knee internal rotation and peak trunk ipsilateral during stance. Despite of limitations to this review including: the limited number of studies, small effect sizes and methodological shortcomings [10].

This study indicate new evidence about the biomechanical risk factors associated with ITB in runners

References

1. Taunton JI, Ryan MB, Clement DB, McKenzie DC, Lloyd-Smith DR, et al. (2002) A retrospective case-control analysis of 2002 running injuries. *Br J Sports Med* 36: 95-101.
2. Van Gent RN, Siem D, van Middelkoop M, van Os AG, Bierma-Zeinstra SM, et al. (2007) Incidence and determinants of lower extremity running injuries in long distance runners: a systematic review. *Br J Sports Med* 41: 469-480.
3. Lavine R (2010) Iliotibial band friction syndrome. *Curr Rev Musculoskelet Med* 3: 18-22.
4. Noehren B, Schmitz A, Hempel R, Westlake C, Black W (2014) Assessment of strength, flexibility, and running mechanics in men with iliotibial band syndrome. *J Orthop Sports Phys Ther* 44: 217-222.
5. Baker RL, Fredericson M (2016) Iliotibial Band Syndrome in Runners: Biomechanical Implications and Exercise Interventions. *Phys Med Rehabil Clin N Am* 27: 53-77.
6. Fairclough J, Hayashi K, Toumi H, Lyons K, Bydder G, et al. (2007) Is iliotibial band syndrome really a friction syndrome? *J Sci Med Sport* 10: 74-76.
7. Shamus J, Shamus E (2015) The management of iliotibial band syndrome with a multifaceted approach: A double case report. *Int J Sports Phys Ther* 10: 378-390.
8. Fullem BW (2015) Overuse lower extremity injuries in sports. *Clin Podiatr Med Surg* 32: 239-251.
9. Phinyomark A, Osis S, Hettinga BA, et al. (2015) Gender differences in gait kinematics in runners with iliotibial band syndrome. *Scand J Med Sci Sports* 25: 744-753.
10. Aderem J, Louw QA (2015) Biomechanical risk factors associated with iliotibial band syndrome in runners: a systematic review. *BMC Musculoskelet Disord* 16: 356.