ILIOTIBIAL BAND SYNDROME

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OVERVIEW
Iliotibial Band Syndrome (ITBS) is a frequently encountered condition in athletes and is the most common cause of lateral knee pain in runners. The Iliotibial band (ITB) is a dense fibrous band formed by the tensor fascia lata and the gluteus medius and minimus muscles. The ITB is a wide, flat superficial thickening that originates at the anterior sacro-iliac spine and inserts at Gerdy's tubercle on the lateral aspect of the proximal tibia. There are a myriad of causes for ITBS and this article will summarize these causes, prevention, and the treatment of Iliotibial band syndrome.

CAUSES
ITBS typically develop secondary to a number of causes related to the runner’s anatomy or training. Issues with the individual’s alignment, equipment, or the running terrain can lead to friction or impingement (1-6). Structural abnormalities of the lower extremity that increase the risk of developing ITBS include high or low arches, foot supination, excessive internal rotation of the tibia due to over pronation of the foot, limb length discrepancy, muscle imbalances, and tightness of the ITB. There are also several training habits that predispose runner’s to develop ITBS including inadequate warm up or cool down, running on a banked surface, stair and hill running, and increased distances.

PREVENTION
In order to prevent ITBS, the runner needs to be aware of the typical causes and to address any anatomical issues and to certain that their training does not increase the external risk factors. The best course would to begin with appropriate stretching and warm up session. If the patient has known anatomical pathology they should address these issues with orthotic devices, strengthen and stretching weak or tight muscles. Additionally, modification of the training regimen to avoid excessive running on uneven terrain, would be of benefit.

TREATMENT
Typically, Iliotibial band syndrome responds to conservative treatment including relative
rest, activity modification, heat/ice, Non-steroidal anti-inflammatory drugs (NSAID), stretching, and physical therapy(1, 2, 6). The focus of treatment should also address any anatomic or training pathology which has lead to the development of ITBS. If the patient is failing to respond to these conservative treatments, an injection with corticosteroids and local anesthetics may be indicated. Rarely are surgical interventions necessary for the treatment of refractory ITBS and have included release, osteotomy, and bursectomy (7-9).

REFERENCES


