

Ilio-tibial band syndrome

By Ian Wilson,
Orthopaedic Surgeon,
St John's NHS



One of the most commonly misdiagnosed problems amongst runners is Iliotibial band (ITB) syndrome. It is however the most common problem involving the lateral aspect of the knee in runners.

Presentation

The pain is usually initiated by a long run and is particularly aggravated by running downhill. The patient describes a sharp pain that comes gradually with each run. It develops after one or three kilometres and progressively intensifies. The runner usually when the patient stops running. Each time the patient runs, the pain is worse than before.

Pathophysiology

The ITB is a thickening of fascia running from the iliac crest to the proximal tibia. When the ITB passes the lateral femoral epicondyle the nerve/arteries for ITB and the epicondyle may become inflamed. In the knee flexed past 90° the ITB passes from anterior to posterior over the lateral epicondyle. Exercises may may result in bursitis, tendinitis or both. Excessively the patient completion of pain over the greater trochanter with the same characteristics occur in the more frequently described pain over the lateral epicondyle. In the case the ITB passes from posterior to anterior on the hip flexion.

Common signs and symptoms

- Inflammation over the lateral epicondyle
- Characteristic pain in the lateral aspect of the knee
- Characteristic pain in the greater trochanter
- Pain worse when the foot of the affected leg strikes the ground
- Crepitation may be noted
- Ober's test positive

Risk increases with

- Repetitive knee flexing sports eg, Distance running or cycling
- Sudden changes in training frequency, amount or intensity
- Tight ITB
- Inappropriate warm up
- Cross train (short legs)

Prevention

- Warm up
- Stretch as follows
- Correct training technique i.e. Alteration of stride, hills and track surfaces

Treatment

Pain should resolve without surgery. Very rarely, surgery may be required.

- RICE
- Ice
- Activity modification
- Stretching
- Lateral heel wedge for pain relief



Medical:

- NSAIDs
- Physiotherapy
- Consideration of local corticosteroid injection

The diagnosis is made on the history and confirmed on the examination. Treatment is usually straight forward and with a compliant patient resolved in approximately six weeks.

Exercises for Ilio-tibial band syndrome.



■ Heel sit lateral femoral epicondyle stretch (stretch leg forward)



■ Standing lateral wall lean (stretch leg against wall)



■ Heel sit stretch (stretch by approximation)



■ Flexion lateral stretch plus prone rotation and pronation (stretch leg supported)