

Iliotibial Band Friction Syndrome

A common injury in long distance runners- risk factors and the need for innovations in treatment.

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Incidence and determinants of lower extremity running injuries

A case controlled analysis of 2002 running injuries was carried out between 1998 and 2002, by Taunton et al, this is the most recent up to date study found on the most common running related injuries. Iliotibial band friction syndrome being the second most common.

Injury	Men N/%	Women N/ %	Total N/%
Patella femoral pain syndrome	124/38	207/62	331
Iliotibial band friction syndrome	63/38	105/62	168
Planter fasciitis	85/54	73/46	158

Figure 1. 26 most common injuries, Taunton et al.

Iliotibial band friction syndrome- Pathology and testing

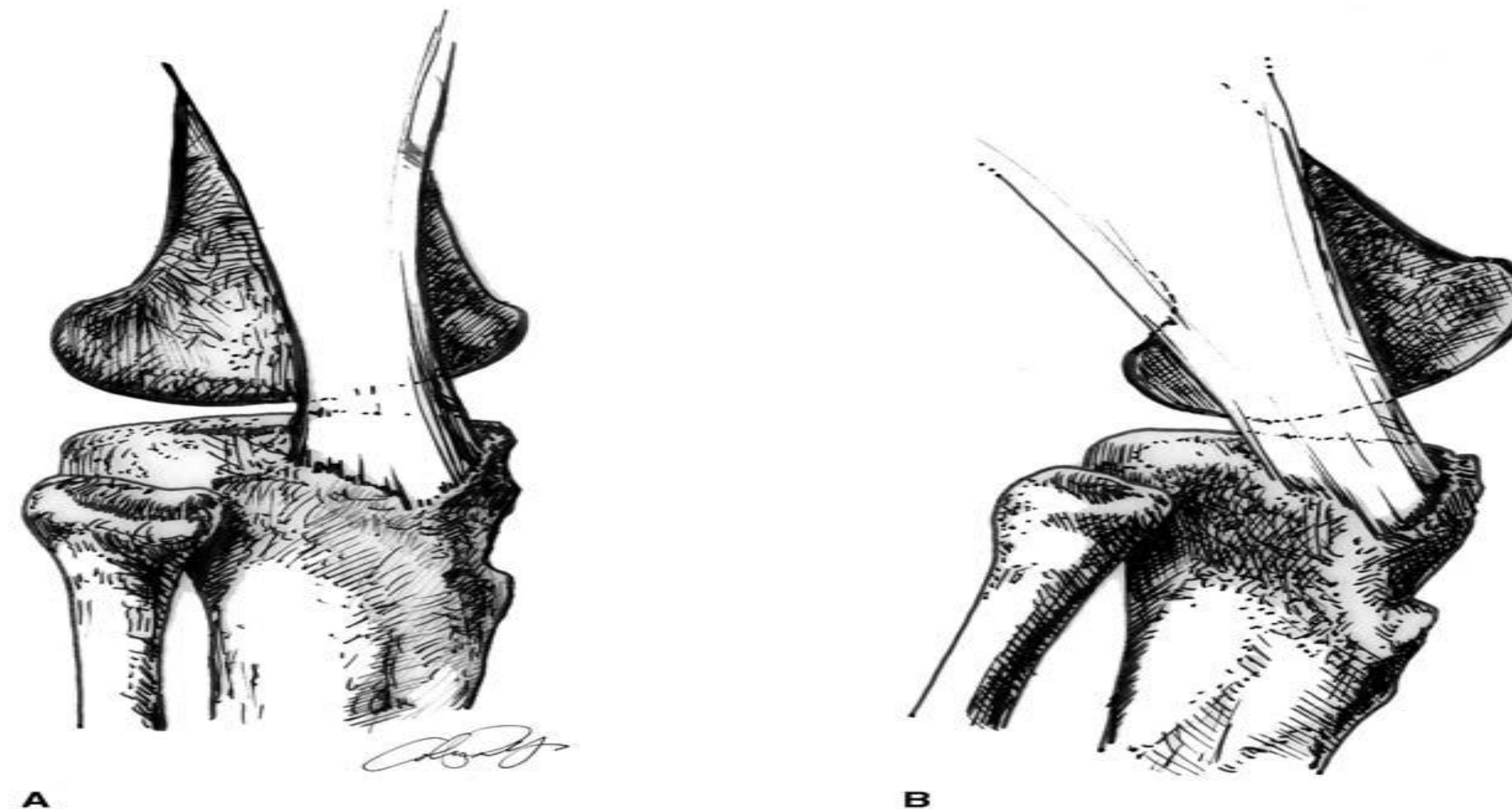
It may be that different subtypes of iliotibial band friction syndrome exist, one that involves irritation of a cyst, bursa, or lateral synovial recess, and a second type arising from compression by the iliotibial band of the connective tissues that underlie the portion of the band between the lateral epicondyle and the knee joint line. There is less evidence that a pathological change takes place in the iliotibial band itself. Whether actual anterior-posterior friction-producing motion of the ITB takes place or not is also controversial. So therefore what treatment should be used?

Testing also is controversial , evidence is low that the preferred “nobels compression test” and “ober test” are definite in diagnosing this condition. So should an MRI be the choice of diagnosing ?

Proposed Etiology of Iliotibial Band Syndrome	
Fairclough et al	Fascia lata compression syndrome
Ekman Et al Harri Et al	Potential fluid filled space, ITB Bursa
Orchard et al	Friction Syndrome, ITB sliding through impingement zone, 30 degrees of flexion “footstrike”

Contributing factors

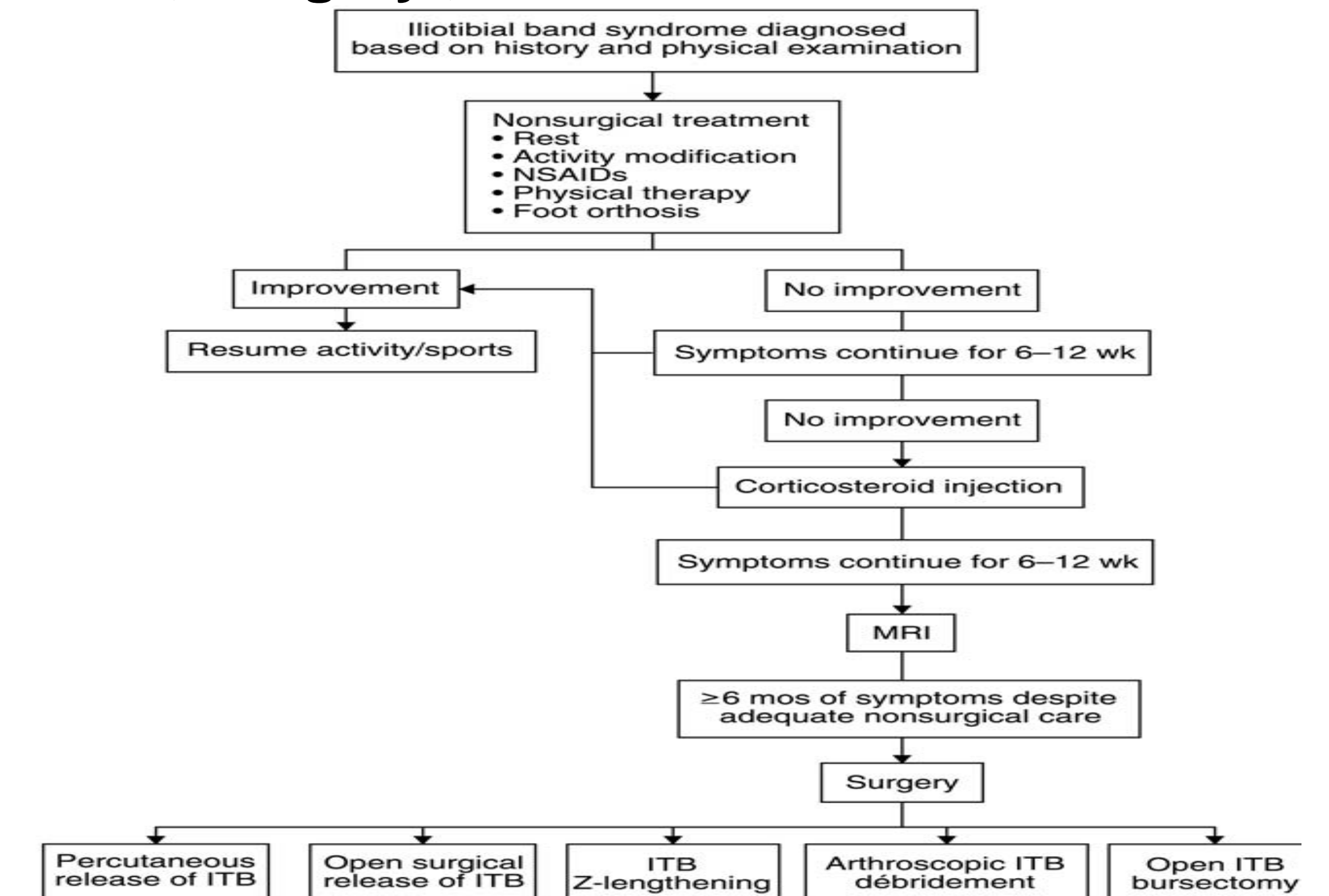
- Weak hip abductors- When these muscles do not fire properly throughout the support phase of the running cycle, there is a decreased ability to stabilise the pelvis and eccentrically control femoral abduction. As a result, other muscles must compensate, often leading to excessive soft tissue tightness and restrictions [4]
- Rapid changes in training [8]
- Hill running, especially down hill- causes decreases in knee flexion at the time the foot strikes the ground, which forces the knee within the orchard impingement zone. Also runners that are fatigued have an increased angle of flexion at heel strike. [9] [8] [7]



A- Knee extension, B -30 knee flexion ITB is compressed against the lateral femoral epicondyle causing increased friction

Treatment options available:

Conservative treatments, NSAIDS, Corticosteroid injection, Surgery , immobilization



Preferred treatment of ITBFS for practitioners

Treatment- evidence

From all the evidence available on treatment for ITBFS, the clinical presentation is well understood. However trying to determine the most appropriate choice of conservative therapy has been made difficult because of lack of clinical trials. Although there are trials including physical therapy modalities for example trigger point therapy, strain counter strain and stretching, these are not done in isolation from other forms of therapy i.e. anti inflammatory medication. Yet stretching, cross fiber friction, dry needling and trigger point therapy seem to be the preferred choice for therapists. What results do you get in your clinic? Do your patients seem to have reoccurring ITB symptoms? Do you treat the contributing factors?

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