

# Iliotibial Band (ITB) Friction Syndrome



Polyclinics  
SingHealth



*Disclaimer: Please note that the instructions shown are strictly for general information only.  
If you have any queries, kindly check with your healthcare provider.*



SCAN ME

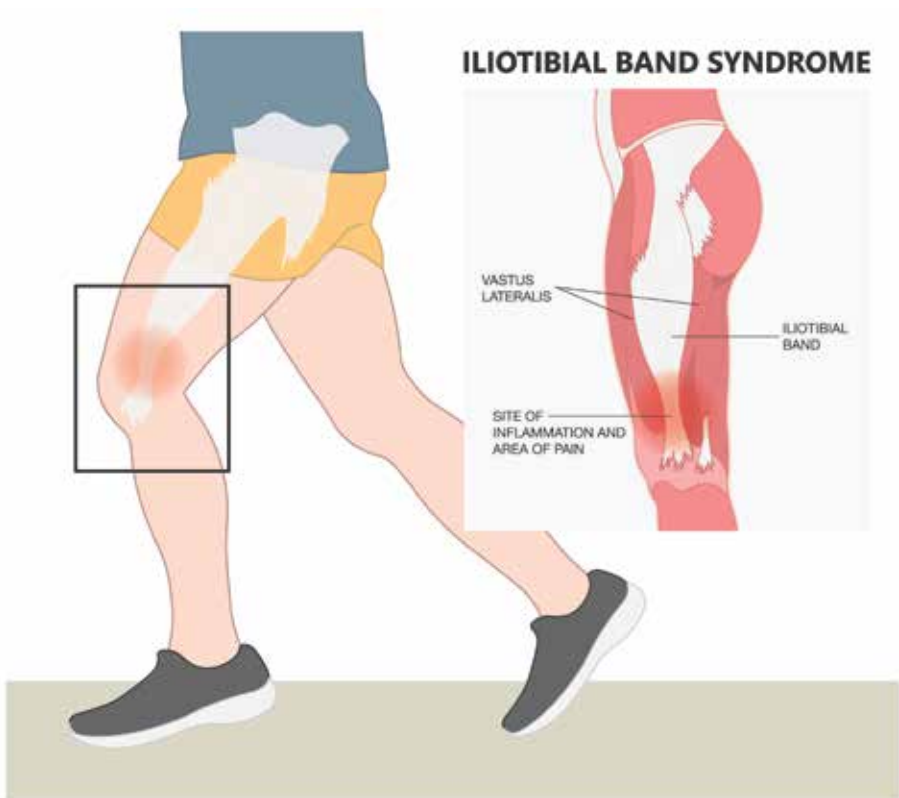


## What is iliotibial band (ITB) friction syndrome?

ITB is a thickened band of soft tissue that runs all the way down the length of the outside of your thigh. It helps to stabilise your knee.

ITB friction syndrome happens when the ITB rubs repeatedly against the lower end of the thigh bone, causing friction, irritation, inflammation and pain on the outside of your knee.

This condition is common in runners, cyclists, military personnel, and people who play sports such as tennis or football.





## What are the common causes of ITB friction syndrome?

ITB friction syndrome is an overuse injury.

Biomechanical and training factors that may cause ITB friction syndrome can include:

- Sudden increase in activity – walk, jog or run a lot more than usual
- Sudden increase in sport training frequency, duration or intensity
- Inadequate warm-up before exercise
- Sudden changes to the training surfaces, especially when you are not accustomed to the condition
- Weak or tight muscles in your hip and knee muscles
- Overpronated foot or flat foot
- Poor footwear, such as worn-out shoes that absorb less shock as you run
- Differences in leg length



## What are the signs & symptoms of ITB friction syndrome?

- A sharp pain or ache on the outside of your knee, and may be accompanied with some swelling
- The outside of your thigh and knee may be tender to touch
- You may also experience pain at the outer part of the hip, especially when you sit with crossed leg
- The pain typically occurs during your exercise, and may spread up or down the knee
- As the condition progresses, you may also have pain when you walk or sit with your knee bent





## How can you prevent ITB friction syndrome?

Increase your exercise intensity or duration gradually

- not more than 10% per week

Replace your worn-out shoes

- running shoes should be replaced every 500 to 750km (approximately 4 to 6 months for people who runs 30 to 35km per week)
- signs of excessive wear include the wearing of the outer sole or the collapsing of midsole

Adequate warm up

- Perform 5 to 10 minutes of low-to-moderate intensity activity such as brisk walking before your strenuous sport activity

Improve strength and flexibility of your hip and knee muscles

- You may also use a foam roller (refer to figure below) to stretch the muscles after exercise





## How long does it take to recover?

The acute knee pain usually settles within 1 to 2 weeks with rest, icing and analgesia.

With proper rehabilitation, most patients can return to sports in about 6 weeks.

Surgery is often not needed for treatment.



## You should seek medical attention early if you have...

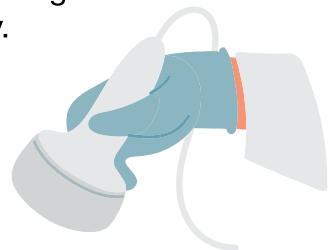
- Inability to put weight on the affected leg
- Prolonged morning knee stiffness
- A hot swollen knee joint
- Rapid worsening of knee pain
- Onset of numbness or weakness of the lower leg



## Do you need an imaging scan?

Imaging scan is not needed to diagnose ITB friction syndrome. Diagnosis can be made clinically through history and physical examination.

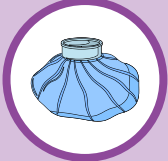


Your healthcare provider will evaluate your condition and may order scans such as X-ray, ultrasound scan or magnetic resonance imaging (MRI) only when necessary.





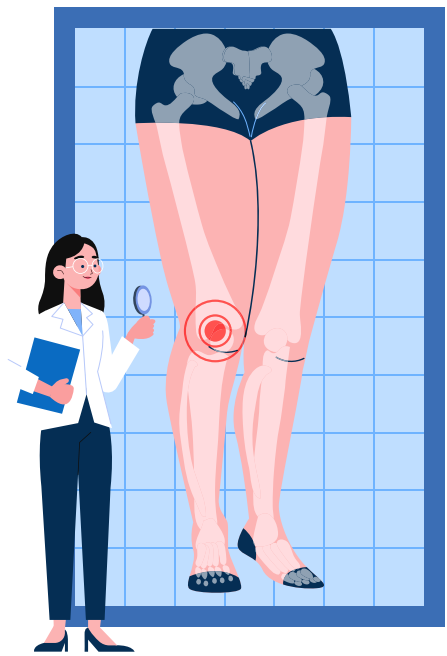
# What are the treatment options?

Depending on the condition, your healthcare provider may recommend:

Activity modification and icing	Medications	Physiotherapy
		
<ul style="list-style-type: none"><li>• During rehabilitation period, you should reduce your training load and repetitive activities that may worsen the condition</li><li>• Apply icing or cold compress over the outside of knee area for 10 minutes to reduce the pain. You can do this every 2 to 3 hours during acute flare up</li></ul>	<ul style="list-style-type: none"><li>• Paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs) can reduce pain and inflammation</li></ul>	<ul style="list-style-type: none"><li>• Appropriate exercise programme and soft tissue treatment can improve your pain and regain your sport function</li><li>• Physical modalities such as therapeutic ultrasound or extracorporeal shockwave therapy (ESWT) can help to relieve your pain and promote recovery</li></ul>



Podiatry	Injections	Specialist referral
<div data-bbox="154 376 318 539"></div> <ul style="list-style-type: none"><li>• Orthotics may be useful if abnormal foot biomechanics is contributing to the condition</li></ul>	<div data-bbox="474 376 638 539"></div> <ul style="list-style-type: none"><li>• Corticosteroid injections may sometimes be considered to reduce the inflammation in the fluid-filled pocket (bursa) at the iliotibial band area</li></ul>	<div data-bbox="799 376 963 539"></div> <ul style="list-style-type: none"><li>• Surgery is seldom required</li><li>• Your doctor will only refer you to see a specialist when necessary for further investigation and treatment</li></ul>

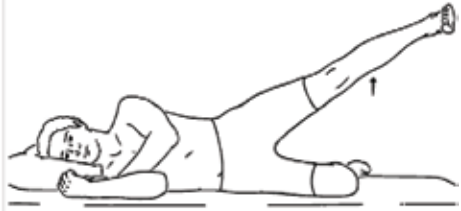


## Simple home exercises:

1



2



3



**You may perform these exercises  
2-3 times a day:**

1. Hip-ITB stretching: **Hold 30 seconds, 3 repetitions**
2. Side-lying leg lift: **Hold 10 seconds, 10 repetitions.**
3. Single-leg bridging exercise: **Hold 10 seconds, 10 repetitions.**

