



## PATIENT EDUCATION GUIDE

# Understanding IT Band Friction Syndrome and Getting Back to Pain-Free Movement

A practical guide to why the iliotibial band flares up along the outside of the knee, what puts you at risk, and how a personalized plan can get you moving again without losing the progress you've already made.

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## SECTION 01

# What Is IT Band Friction Syndrome?

The iliotibial band is a large band of fascia running from the outside edge of the pelvis, down the outside of the leg, and attaching onto the top of the tibia in the lower leg. Along with the muscles that attach to it, the IT band works to stabilize the knee and provide motion at the hip.

IT band friction syndrome, often shortened to ITBFS, is an overuse injury common in runners, athletes, and anyone exposed to repetitive strain type motions in the workplace. The pain typically comes from repetitive compression of the fat pad that sits between the IT band and the outside of the knee, or from repetitive friction as the band crosses the knee itself. A number of factors can contribute to its onset, including sudden increases in exercise volume or intensity, a jump in running mileage, improper warm-up before activity, muscular tightness, bow-legged alignment at the knees (genu varum), and excessive pronation of the foot, among other sources.

## SECTION 02

# Recognizing the Symptoms

Symptoms are typically isolated to the outside portion of the knee and may include:

- Sharp pain or a dull ache that typically starts shortly after activity begins and can persist after you stop
- Muscular tightness
- Swelling
- Stiffness upon waking in the morning
- Pain while flexing the knee



Discomfort from ITBFS often lingers after activity ends, not just during it.

## SECTION 03

# What's Actually Happening at the Knee

ITBFS pain comes from one of two closely related mechanisms: repetitive compression of the small fat pad between the IT band and the lateral knee, or repetitive friction as the band slides across the knee with every step. Either way, it is fundamentally a load problem, not a structural injury. The tissue itself isn't damaged in the way a torn ligament would be; it's irritated from doing the same motion more often, more forcefully, or with poorer mechanics than it's currently able to tolerate.

## Why this matters for treatment

Because the root cause is usually mechanical, effective treatment tends to focus on changing the load rather than just treating the pain in isolation. That can mean adjusting training volume, addressing muscular tightness, correcting alignment issues at the foot, or some combination of all three, depending on what your specific assessment reveals.

## SECTION 04

# Risk Factors Worth Knowing

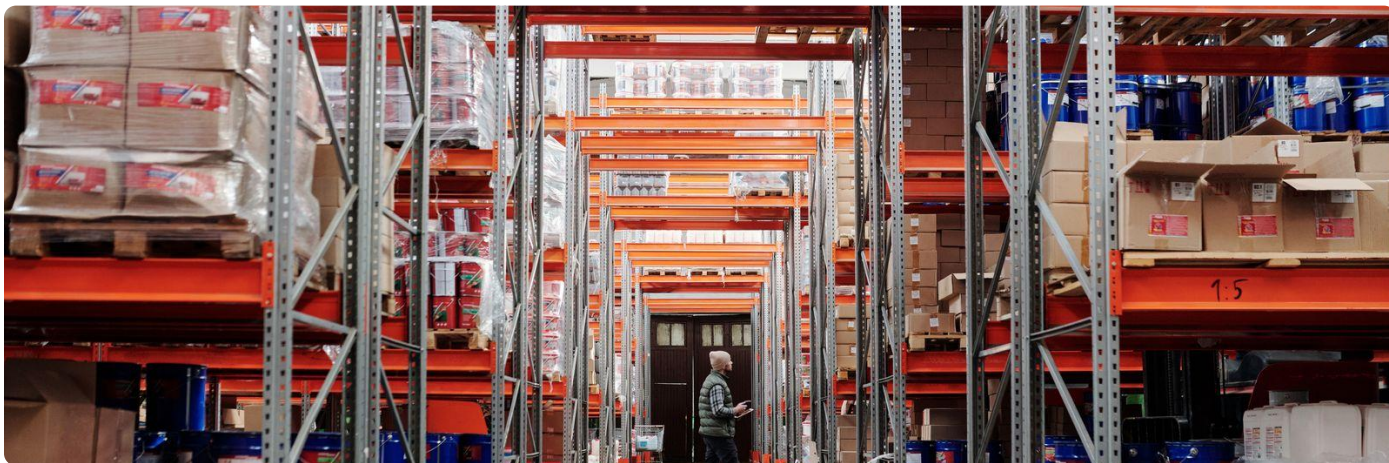
A number of factors raise the risk of developing ITBFS, and many of them are within your control once you know to look for them:

- Too much, too soon, too fast: increasing running mileage or training intensity too quickly is a common source of injury
- Poor running mechanics
- Activities with lateral movement or sudden direction changes
- Poor-fitting or worn-out footwear
- Unsupportive footwear, such as sandals or poorly structured shoes
- Uneven terrain, including trails or loose gravel, which places greater strain on the involved tissues
- High-impact, high-volume, or high-intensity exercise
- Being overweight or obese, which may increase strain on the muscles and tendons of the lower legs depending on your mechanics
- Your individual alignment and mechanics, which may predispose you to IT band strain; a physiotherapist or podiatrist can help confirm whether this applies to you





Uneven or rocky terrain places greater strain on the IT band with every uneven footfall.



Repetitive strain isn't limited to sport; jobs with constant walking or standing carry similar risk.

If your mechanics might be contributing to your symptoms, a proper assessment can confirm it and point to the right fix.

[Book an Assessment](#)

[garnetsolutions.ca](https://garnetsolutions.ca)

## SECTION 05

# Staying Active With Pain

Staying active while you recover matters for your overall health and well-being, but the exercises you choose while recovering matter just as much. As a general guideline, avoid anything that induces or intensifies your symptoms, both during the activity and afterward. With soft tissue injuries like this one, the tissue often warms up and feels fine while you're active, only for the discomfort to set in once you stop, after a period of rest, or the next morning when you get out of bed.

If that pattern sounds familiar, reduce the intensity or duration of the activity until you reach a level that doesn't provoke your symptoms. In particular, limit repetitive strain activities like running and cycling for

the time being. While you recover, mild-intensity exercise or cross-training that keeps you active without repeating the aggravating motion is generally the better choice.

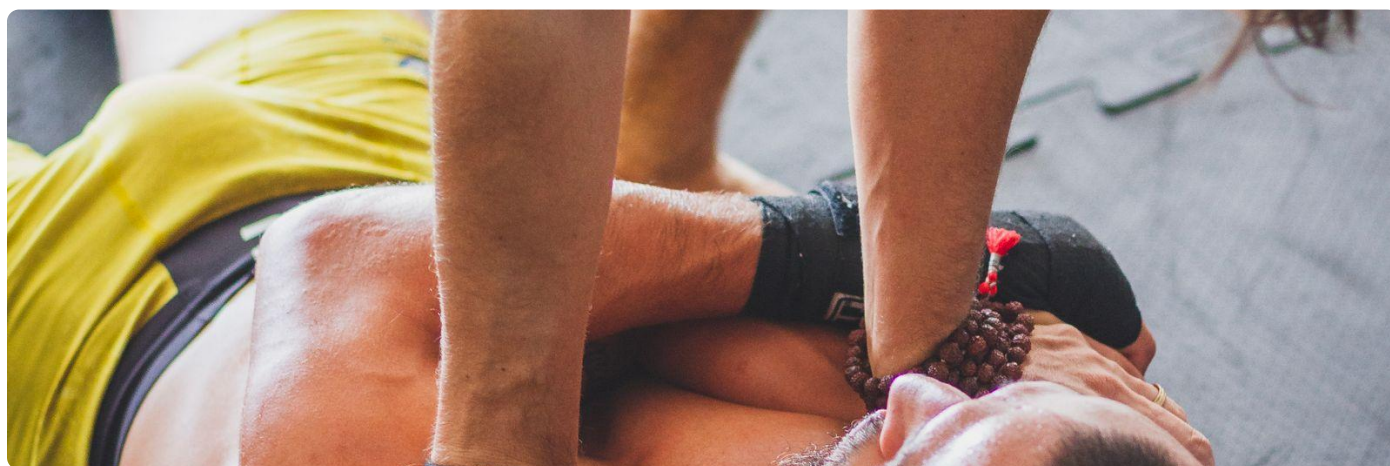
There are a number of ways to address ITBFS. Our hope is that the information here is enough to start your road to recovery.

## SECTION 06

# Your Treatment Options

Your family physician typically serves as the first line of care and can help with medications, lifestyle adjustments, or a referral to the right specialist. From there, several professionals may play a role, often working together:

- Physiotherapists and kinesiologists can assist with exercises, stretches, or lifestyle adjustments
- Podiatrists can address motions of the foot that may be contributing to the strain placed on the IT band and surrounding tissues
- Kinesiologists can also help with ergonomics, ensuring your living and work environments support your posture and mechanics
- Massage therapists may help ease muscular stiffness or discomfort



Guided stretching and soft tissue work are common first steps in an ITBFS recovery plan.

## SECTION 07

# Footwear Recommendations

Appropriate footwear matters for day-to-day comfort while you recover, and the right choice depends on your specific mechanics. Generally, footwear with ample cushion and support works well during ITBFS recovery, but it's important that your shoes aren't so overly supportive that they end up contributing to the problem.

Footwear with added support along the inside of the foot, such as pronation control or stability shoes, is designed to limit how much your foot rolls toward the midline of the body. If that motion is already naturally reduced, or if your foot moves away from the midline instead (supinates), this type of shoe may actually worsen your symptoms rather than help. Whichever shoe you choose, proper fit is essential: length, width, depth, and heel height all matter. Consult with your pedorthist for recommendations specific to your foot type and intended use.

SECTION 08

# Custom Orthotics vs. Off-the-Shelf

Your foot type and movement patterns are almost as unique as your fingerprint. Depending on your specific mechanics, custom foot orthoses may support the motions of the foot and lower leg that are contributing to your discomfort. Where your heel strikes the ground, and the degree to which your foot pronates, can both place added strain on the IT band and the muscles that support it. Current research suggests custom foot orthoses can reduce these excess movements at the foot, easing the demand placed on the knee and hip muscles above it.

Off-the-shelf, or OTS, orthotics are pre-fabricated devices that fit into your shoes right off the shelf; many are heat-moldable, allowing for some immediate customization. Truly custom foot orthoses differ in that they're designed specifically around a 3D model of your own foot, tailored completely to your needs.

| OFF-THE-SHELF ORTHOTICS |                                   | CUSTOM ORTHOTICS                                    |
|-------------------------|-----------------------------------|-----------------------------------------------------|
| Cost                    | Cheaper upfront                   | Often partly covered by extended health benefits    |
| Availability            | Instant, off a shelf              | Made for you, ready in a matter of days             |
| Fit                     | Generic size range, heat-moldable | Shaped to your exact foot and gait                  |
| What it does            | Offers general arch support       | Corrects the specific motions straining the IT band |
| Lifespan                | Wears out, replace often          | Built to last, and adjustable as you recover        |

Depending on your symptoms, an OTS device may be a great first step. If it doesn't quite offer enough support, or doesn't match your foot type well, custom is usually what gets you the rest of the way.

Curious whether you're a candidate for custom foot orthoses?

See Custom Orthotics



## SECTION 09

# What to Expect at Garnet

Your Garnet pedorthist starts working with you to feel better immediately after your first visit, rather than waiting until your custom orthoses are ready. That process typically includes static alignment and posture analysis, strength and flexibility testing, dynamic movement testing, and clinical gait analysis, so we understand exactly how your foot and lower leg are moving before recommending anything.

While your custom foot orthoses are being manufactured, which typically takes three to five days, your pedorthist works with you to improve comfort both in and out of the house. The shoes you wear and the activities you choose in the meantime can be your best friend or your worst enemy, and we'll help you tell the difference.

Want to understand what a gait analysis actually involves before you book?

[Learn About Gait Analysis](#)

[Book Now](#)

## SECTION 10

# Prevention and Long-Term Movement Health

Because ITBFS is fundamentally about load exceeding what the tissue can currently tolerate, prevention comes down to managing that load thoughtfully as you build back up:

- Increase running mileage or training intensity gradually rather than in sudden jumps
- Warm up properly before activity
- Address muscular tightness before it becomes a limiting factor
- Choose supportive, well-fitted footwear suited to your specific mechanics
- Favor even terrain where possible, and adjust effort on trails or loose gravel
- Use custom foot orthoses where your assessment shows they would help

Don't let ITBFS get you down. Get back on your feet, today.



## Ready to talk to a pedorthist?

Book a consultation and get a treatment plan built around your specific mechanics, gait, and goals.

[Book an Appointment](#)

Garnet Orthopedic Solutions provides pedorthic assessment, custom orthotics, and footwear guidance built around each patient's specific anatomy and goals, rather than a one-size-fits-all approach. Our clinic combines hands-on biomechanical assessment with practical, evidence-informed treatment, so patients leave with a plan they understand and can actually follow.

### Jeff Lewis, C. Ped (C)

Canadian Certified Pedorthist

Jeff leads patient assessment and custom orthotic care at Garnet Orthopedic Solutions, working with patients to identify the root cause of their foot and lower limb pain and to build a treatment plan suited to their specific needs, goals, and symptoms.

[garnetsolutions.ca](https://garnetsolutions.ca) | This guide is intended for general education and does not replace an individual assessment. Please consult your pedorthist or physician about your specific symptoms.

## Appendix: Image Sources

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| # | DESCRIPTION                                                   | PHOTOGRAPHER            | SOURCE                                                                    |
|---|---------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------|
| 1 | Cover — woman jogging outdoors in bright activewear           | Cristian Camilo Estrada | <a href="https://pexels.com/photo/35261920">pexels.com/photo/35261920</a> |
| 2 | Sec. 2 — athlete using a roller to massage leg after training | Pexels contributor      | <a href="https://pexels.com/photo/19070991">pexels.com/photo/19070991</a> |
| 3 | Sec. 4 — rough, uneven rocky terrain                          | Pexels contributor      | <a href="https://pexels.com/photo/7599752">pexels.com/photo/7599752</a>   |
| 4 | Sec. 4 — worker walking in a warehouse aisle                  | Tiger Lily              | <a href="https://pexels.com/photo/4483775">pexels.com/photo/4483775</a>   |
| 5 | Sec. 6 — trainer helping athlete stretch on a foam roller     | Pexels contributor      | <a href="https://pexels.com/photo/5485460">pexels.com/photo/5485460</a>   |

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