

Plantar Fasciitis

What are the Plantar Fasciitis Facts?

- The plantar fascia is a tough thick, fibrous band of connective tissue which originates at the heel bone and runs along the bottom of the foot and fans to attach to the base of each of the toes.
- The plantar fascia takes on a number of functions during running and walking.
 - It stabilizes the midfoot during impact with the ground
 - It acts as a shock absorber for the entire leg
 - It assists in lifting the longitudinal arch of the foot to prepare it for the 'take-off' phase of the gait cycle.
- A person suffering from plantar fasciitis will often feel a pinpoint, knife-like pain at the inside of the heel, which is the exact location of the origin of the inside part of the plantar fascia
- Plantar fasciitis is often associated with 'heel spurs' which are simply collections of calcium deposited at the site where the fascia suffers most damage.
- Success in treating plantar fasciitis is most successful when treatment is started within six weeks after the onset of symptoms. Time for resolution can sometimes be 6 to 18 months

Who Gets PF?

- Middle aged women are more likely to get the condition
- If you're overweight you are more likely to suffer from PF
- If you have a job that requires a lot of walking or standing on hard surfaces. Studies have found that over 50 per cent of people who suffer from PF are on their feet nearly all day
- Also people with very flat feet or very high arches are also more prone to PF.
- You're also at risk if you walk or run for exercise.
 - Approximately 5 to 10 per cent of all running injuries are inflammations of the fascia
 - If you increase your running volume. Overuse is the most common cause of plantar fasciitis in athletes
- Active sports participants : Basketball players, tennis players, volleyballers, step-aerobics participants, and dancers are also prone to plantar problems
- If you have tight or weak calf muscles .
- Often sufferers wear shoes with poor cushioning or inadequate arch support

What does PF feel like?

- A classic sign of plantar fasciitis is that the worst pain occurs with the first few steps in the morning under the sole of the foot.
- Sufferers often notice pain at the beginning of activity that lessens or resolves as they warm up.
- The condition starts gradually with mild pain at the heel bone often referred to as a "stone bruise".
- You're more likely to feel it after (not during) exercise.
- Pain may also occur with prolonged standing.
- In severe cases, the pain will also worsen toward the end of the day.

Footeez for Plantar Fasciitis

Typical Treatment Plan

Involves

- A period of "relative rest" where alternative forms of activity for activities that aggravate the symptoms are prescribed. Training errors need to be corrected.
- the use of **Lockeroom Ice Mate** after activities under the sole of the foot
- and an evaluation of the patient's shoes and activities.
- then correction of biomechanical factors with a stretching and strengthening program.
- If the patient still has no improvement, we consider night splints and orthotics.

Stretching and Strengthening programs

Stretching and Strengthening programs play an important role in the treatment of plantar fasciitis and can correct functional risk factors such as tightness of the gastroc/soleus complex and weakness of the intrinsic foot muscles. Increasing strength and flexibility of the calf muscles is particularly important.

Flexibility

- the gastrocnemius is stretched by keeping the knee extended while passively dorsiflexing the foot
- the soleus is stretched by flexing the knee while dorsiflexing the foot.

(Patients should be encouraged to repeat the gentle, sustained stretches at least 3-4 times for 30 secs , five or six times daily).

For a stronger stretch use a decline box or your footeez

Foot Intrinsic exercises

Strengthening programs should focus initially on intrinsic muscles of the foot then also at improving calf strength.

- **Towel curls:** sit with the foot flat on a towel placed on a smooth surface. Keeping the heel on the floor, the towel is pulled toward the body by curling the towel with the toes..
- **Toe taps:** all the toes are lifted off the floor and, keeping the heel on the floor and the outside four toes in the air, the big toe is tapped to the floor repetitively. Next, the process is reversed, and the outside four toes are repetitively tapped to the floor while keeping the big toe in the air.

Calf Strengthening

- Early Stage: double leg calf raises with feet flat on floor progressing to single leg
- Middle Stage: Double leg calf raises over step
- Late Stage: single leg calf raises over step

Calf stretches

Stretch for 30 secs 3-4 times. Repeat several times daily



Using Footeez



Using Footeez

Calf stretches



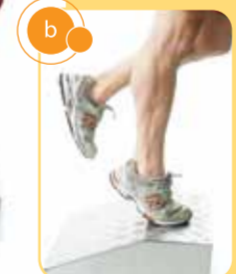
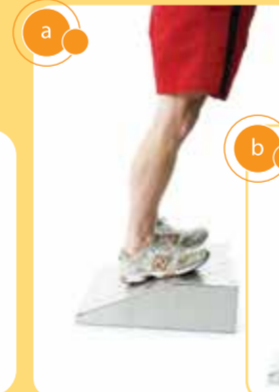
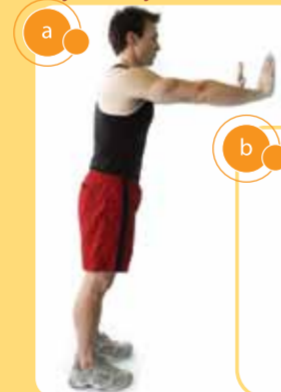
Using decline box



Using decline box

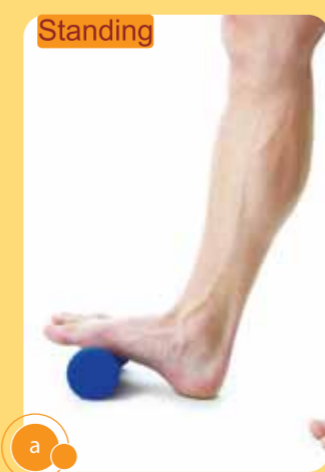
Calf strengthening

At each level perform 10-15 calf raises 2-3 times. Progress to 2-3 sets of 20-30 raises slowly. Move to next level only after you can complete previous level without discomfort.



PF Massage

You can spend 5-10 minutes comfortably rolling daily



Standing



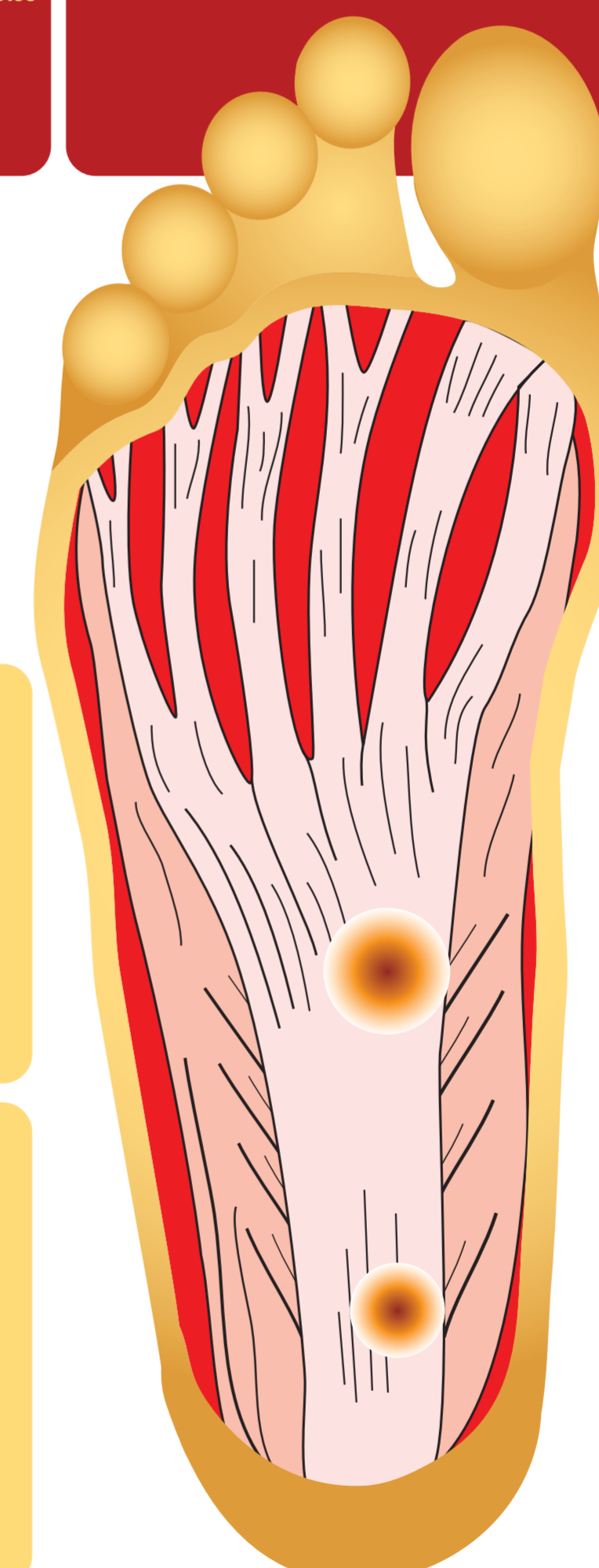
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Sitting



Footwear

Sufferers should:

- not walk barefoot on hard surfaces.
- wear motion control type shoes for those with flat feet
- not wear worn shoes because of lack of cushioning
- wear laced sports shoes rather than open sandals or barefeet.

Arch Supports

Patients with low arches theoretically have a decreased ability to absorb the forces generated by the impact of foot strike.

Three most commonly used mechanical corrections are

- Arch taping by physiotherapist
- Over-the-counter arch supports from your shoe supplier are often used to provide cushioning by reducing the shock. These should be ¼ length to accommodate the flattening of the foot and stretching of the PF.
- Custom orthotics by a podiatrist

Anti-inflammatory treatments

- Ice using your **Lockeroom Ice Mate** or **CoolHeat**
- NSAIDs (Non-Steroidal Anti-Inflammatory Drugs) by prescription from your GP
- Iontophoresis by your GP or Sports Physicians
- Local steroid injections..by your Doctor

For Tough Cases:

Night splints-- Night splints usually are designed to keep a person's ankle in a neutral position overnight. A night dorsiflexion splint allows passive stretching of the calf and the plantar fascia during sleep. Theoretically, it also allows any healing to take place while the plantar fascia is in an elongated position, thus creating less tension with the first step in the morning.

Below knee casts--Patients with severe pain and marked limitation of activity are best treated with a moulded, below knee, walking cast for three to four weeks. It provides relative rest, reduces pressure on the heel at heel strike, provides an arch support, and prevents tightening of the Achilles tendon.

Surgery--Some cases do not respond to conservative treatment, surgical release of the plantar fascia can be considered.

What is Footeez?

Health professionals have long used a variety of techniques for the treatment of lower limb muscular and fascial tightness... Tennis and golf balls, trigger balls, bottles and occasionally rolling pins. Lockeroom's *Footeez* is specifically designed by physiotherapists to assist professional treatment and help patients self manage muscular tightness. *Footeez* is packaged with this comprehensive information chart containing symptoms, uses and alternative treatments. For info on the use of the *Footeez* for ITB Syndrome refer this page, and for Plantar Fasciitis (PF) see overleaf

Iliotibial Band (ITB) Syndrome

This is one of the most common, and often most frustrating, running related injuries. It is also easily treated if diagnosed and treated early before it becomes chronic. If someone has faulty pelvic mechanics, then the muscles that attach to the pelvis will not work as efficiently. If they pull at a slightly different angle, they'll often get tight and sore.

What is the ITB?

The Iliotibial Band (ITB) is a thickening of the fascia, or the outer casing of the muscle, that runs up the outside of the thigh. It originates up by the top of the hip and ends on the outside of the knee. You can feel your ITB when you stand. It causes the outside of your thigh to become very firm and tight while your thigh muscles remain more relaxed.

What's Causes it?

ITB syndrome or lateral knee pain is being caused by the ITB pulling up on it's insertion on the outside of the knee. Underneath the ITB near it's insertion at the knee is a bursa. Bursae are fluid filled sacs that lubricate areas where rubbing and friction occur. When that ITB was pulled tight it put too much pressure on the bursa and that bursa reacted by becoming inflamed and swollen, causing pain.

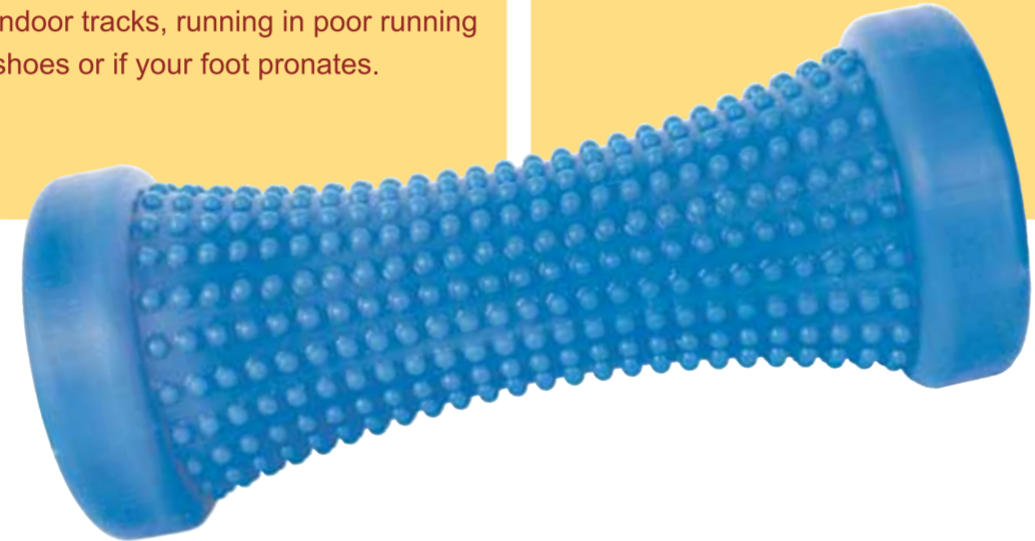
The ITB can be pulled tight by the TFL or the Gluteus Maximus. Running up hills uses more of the glutes than running on flat ground therefore can tighten your ITB. The ITB can also be aggravated by running on uneven roads or on tight indoor tracks, running in poor running shoes or if your foot pronates.

How do I know I have it?

- Lateral (outside) knee pain
- Pain is often worse after running, especially after climbing hills and aggravated by climbing stairs
- Pain may not be present until mid-way through a run
- Pain can often cause a runner to stop
- Sometimes can be associated with a 'snapping hip', in which the muscles that cross the outside of the hip can be felt to snap or click during walking or running
- Pain may also present as lateral thigh pain more so than knee pain
- Can often be attributed to some form of over-training

How Do I Fix it?

- Address faulty pelvic mechanics by seeing your physiotherapist
- Strengthen weak pelvic stabilizers
- Modify or stop running (especially hills) until pain has disappeared.
- Use your *Lockeroom Ice Mate* over outside of the knee when pain is severe
- Stretch and "Trigger" the Glutes and TFL muscles using the *Lockeroom Stretchband* or "*Pocket Physio*"
- Self-massage over your lateral thigh using the *Footeez*
- Deep massage of the glutes is also useful
- Assess and correct faulty foot mechanics (pronation) by seeing your Podiatrist for orthotics
- Get the right pair of running shoes for your foot
- Return to running slowly



ITB Releases: double leg

Roll slowly up and down on your Footeez. Find an uncomfortable point and hold for 30-60 secs. While you are rolling change positions: slightly roll forward then backwards

ITB Releases: single leg

How to make it work for you

ACTIVITY	AREA OF TIGHTNESS	TREATMENT OPTIONS	SELF MANAGEMENT Using Lockeroom products
Standing	Lower Back, ITB, Plantar Fascia	<ul style="list-style-type: none"> • Physio, • Osteopathy • Massage • Podiatry • Exercise Physiologist • Personal Trainer 	<p>LBP : Posture Pro Glutes/ITB: Pocket physio ITB/Quads/Peroneals: Footeez</p>
Walking	Gluts, ITB, Quads, Peroneals, Calf, Plantar Fascia		
Running	Gluts, ITB, Quads, Hamstrings, Peroneals, Calf, Plantar Fascia		
Cycling	Back, Gluts, ITB, Quads, Peroneals, Calf	<ul style="list-style-type: none"> • Back: Posture Pro • Gluts/ITB/Quads/Peroneals/ Calf: Pocket Physio/Posture Pro • Lats: Pocket Physio/ Footeez • Back: Posture Pro 	<p>Back: Posture Pro Gluts/ITB/Quads/Peroneals/ Calf: Pocket Physio/Posture Pro</p>
Swimming	Upper Back, Lats, Post Shoulder		
Throwing	Lats, Post Shoulder		

This product should be used only as described in the product brochure information. We always recommend you should seek professional medical advice in conjunction with the use of this product and the information contained with it. Lockeroom Sports will not accept responsibility for injuries incurred while using this product.

Other Footeez releases

Calf Releases

Ideal to ease tight calves after walking or running

Peroneals

For lateral lower leg tightness after sport

Gluts

To assist in preventing lower back tightness

Hamstring

Prevent hamstring tightness, use your Footeez after running, cycling

Quads

Great after cycling

Lats

Perfect following swimming or a gym work out

Triceps