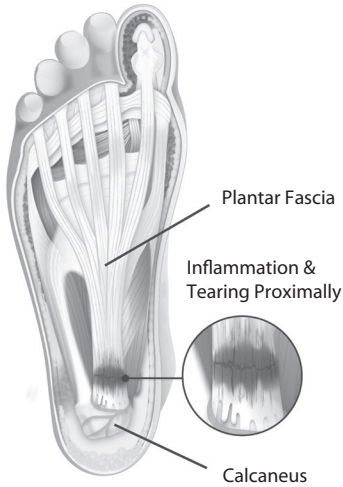


BioPed plantar fasciitis



Plantar fasciitis (PF) is an inflammation of the plantar fascia. The plantar fascia is a thick band of tissue that originates at the heel bone, extends forward under the arch and inserts into the toes. The purpose of the plantar fascia is to maintain the arch shape in one's foot by binding the bones, muscles, ligaments and soft tissues together.

When the arch flattens, the plantar fascia stretches excessively, resulting in micro-tears where it attaches at the heel. Inflammation usually occurs at this point. The pain associated with the tearing subsides with periods of rest. Upon standing, the arch flattens and the fascia re-tears, resulting in a burst of exquisite pain.

CAUSES & SYMPTOMS

Plantar fasciitis is a result of one or a combination of the following:

- Overuse: Walking and standing for long hours, increasing activity too rapidly.
- A Problematic Foot Structure: Flat feet, high arches, weak ankles or a short 1st toe relative to the 2nd toe.
- Rapid weight gain, or obesity.
- A tight calf muscle.
- Pregnancy.
- Unsupportive footwear.

Heel spurs are seldom the reason for pain – pain is a symptom of inflammation due to micro-tears of the fascia.



Normal Arch

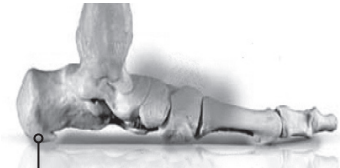


Fallen Arch

When the calf muscles that support the arch fatigue or are tight, the arch can drop, tearing the fascia.

Symptoms

- Pain in the heel region is the most common symptom, however pain may develop under the arch.
- Pain is initially worse in the morning but can return by the end of the day.
- Leg, knee and hip pain may result as patients adjust their stance or gait to compensate for the foot pain.



A heel spur is rarely ever the cause of pain even if one is present.

Plantar Fasciitis is the most common cause of heel pain in adults. It is estimated that 1 in 10 individuals will develop PF at some point in their life.

**THE SOLUTION****Effective Treatment Options**

The American College of Foot & Ankle Surgeons recently (2010) published a document to guide the treatment of plantar fasciitis. They recommend the combination of orthotics, supportive footwear, stretching and cortisone injections to eradicate the condition and any associated pain.

Orthotics

Custom made orthotics support the skeleton, muscles and fascia in the correct position. Orthotics are a long term solution to prevent reoccurrence by controlling and/or correcting the mechanics that cause the problem.

Types of Orthotics

- Rigid orthotics can be made with thin, strong materials that fit within dress shoes, skates and golf shoes.
- Semi-rigid orthotics are made with shock absorbing materials, moulded with support systems and handcrafted to relieve pressure areas. Recommended for high-impact activity on hard surfaces.
- Both rigid and semi-rigid orthotics can be made with higher sides and thicker materials depending on the patient's needs. However, orthotic thickness is limited by the depth within the footwear.

Footwear

Stability footwear is recommended. Often the patient's footwear, whether too soft, hard or worn out, has been a contributor to the problem.

- Stability footwear: Built with a wide sole base that provides medial and lateral support (high sides), available in athletic shoes, walking shoes, sandals and boots.
- For the most effective treatment of morning pain, it is recommended that the patient leave supportive sandals, or shoes that house their orthotics, beside their bed. Immediately upon rising, they should put them on prior to standing up (to support the fascia and prevent tearing).

BioPed Foot Care Specialists

BioPed clinicians are specialized in the casting, manufacturing, fitting and modification of many types of custom made orthotics. They can also make recommendations on proper footwear and stretches. At clinics where Chiropractic services are offered (bioped.com/chiropractic), cortisone injections are also offered to relieve plantar fascia inflammation, provide pain relief and aid in healing.

Please visit www.bioped.com for
a list of all clinics across Canada