

Plantar Fasciitis and Orthotics



Centre for Chiropractic & Sports Rehabilitation

An integrative, biomechanical approach to the everyday sports and spinal injuries.

Plantar Fasciitis is an inflammation of the plantar fascia, the connective tissue on the sole of the foot. This inflammation most commonly occurs at the attachment of the fascia to the calcaneus (the heel bone). This inflammation is known to cause debilitating pain, but this pain *can* be treated!

Plantar Fasciitis occurs when specific tissues of the foot are put under stress. A common example of this is an actively pronated foot (more commonly known as a flat foot or dropped arch). Some people are genetically predisposed to flat feet, and other experience a gradual flattening of the arch as time goes on and as gravity acts on a weight-loaded foot. The arch drops, and the rest of the foot must compensate to perform its intended locomotor function. To achieve this, the muscles on the outside of the foot stretch and become overloaded, causing a low-grade inflammatory process that leads to micro tears in the fascia. When these micro tears occur at the heel, which is most common, this is known as a heel spur.

Treatment at CCSR

Treatment at CCSR will always begin with a comprehensive diagnosis of your condition. Often, the plantar fascia is *not* the only issue present when you experience heel pain! The foot houses many soft tissues, and a fine-tuned diagnosis will often indicate tightness or inflammation in many soft tissues of the foot. Further to this, impaired leg muscles almost always contribute to plantar fascia pain: if your legs aren't performing at their peak potential, the load that they usually take is placed instead on your foot. So, treatment at CCSR is twofold: we aim to improve the function of the muscle groups in your legs (calves, hamstrings, glutes, and sometimes the low back), as well as reduce the inflammation in your foot. We employ a multitude of techniques that are proven to reduce inflammation and improve your symptoms: manual adjustment of the foot structure, soft-tissue therapy, massage, active release, low-level laser therapy, and the Graston technique.

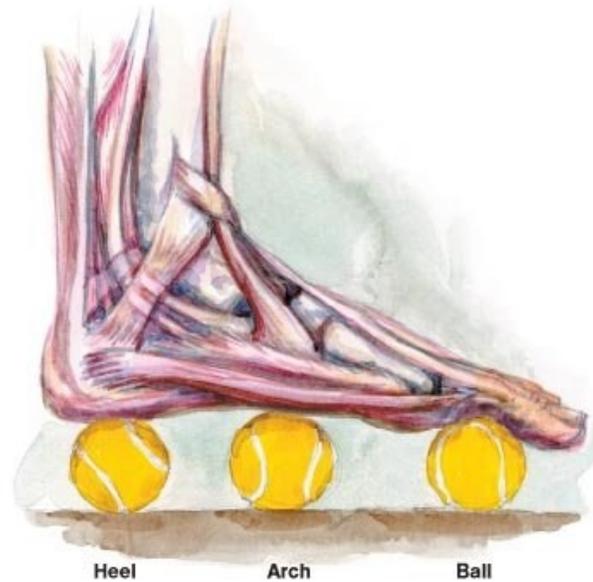


Figure 1: Rolling a tennis ball on the sole of your foot can help relieve Plantar Fasciitis symptoms

Treatment at Home

Weekly treatment at CCSR will help to manage your Plantar Fasciitis symptoms, but true healing will happen only when you commit to a daily regime of home treatment. The goal of treatment is to clear out damaged cells and replace them with regrown, healthy collagen; this will only happen if self-treatment is consistent. Self-treatment for Plantar Fasciitis is fairly easy, and most of it can be done while working!

Ice: Applying ice is the most effective way to reduce inflammation. Wrap a bag of ice in a tea towel and apply to your heel for 15 - 20 minutes. Do this two or three times a day.

Stretch: Stretching your calf muscle will improve calf function, which will take the load off of your affected foot. Stand facing a wall with your heel on the floor and the ball of your foot pressing on the wall. Lean forward until you feel a stretch through your calf muscle. Do this with your toes pointing inwards, then perpendicular to the floor, and then with your toes pointed outwards. Complete each stretch for 60 seconds. Try to complete this between four and ten times each day.

Roll: Rolling will break up damaged fascia and stimulate the regrowth of healthy collagen. Roll a bouncy ball, golf ball, or wooden dowling against the ball, arch, and heel of your foot. Apply as much pressure as you can,

and spend considerable time on the most painful areas; rolling should be just as painful as the active release and soft-tissue work that you experience at CCSR. This will ensure effectiveness of the treatment!

Orthotics

We encourage patients who experience Plantar Fasciitis to consider orthotics; no amount of strengthening or stretching can overcome poor foot structure, so biomechanical correction is necessary. Orthotics are this biomechanical correction! Orthotics will support a fallen arch and will correct heel placement, improving the musculature of the foot. Correcting this foot posture will not just improve Plantar Fasciitis; it will improve the locomotor function of the entire body. Patients who have invested in orthotics have experienced an improvement in their Plantar Fasciitis symptoms, as well as improvement in the function, flexibility, and strength in their calves, hamstrings, glutes, and low-back.