

HEEL PAIN

Heel pain is a very common reason for people of all ages to visit their podiatrist. Many different things can cause heel pain, but one of the most common is a condition called plantar fasciitis. The heel bone is called the calcaneus, and it is the largest bone in the foot. The calcaneus is a major component of the foot and serves as an attachment for multiple muscles, tendons, and ligaments.

PLANTAR FASCIITIS

Plantar fasciitis is the inflammation and irritation of the plantar fascia.

- The plantar fascia is a ligament-like structure that runs along the bottom of the foot. It starts on the bottom of the heel and runs along the arch towards the toes.
- Patients will feel plantar fascia pain most often on the bottom of their heel and arch.
- While symptoms can vary, it is often worse with the first steps getting out of bed in the morning and after prolonged walking and standing.
- The pain usually starts gradually and not due to a sudden injury.
- *Causes:*
 - a) Many different things can lead to plantar fasciitis, but some of the more common causes include tight calf muscles, bad/worn out shoes, too much or not enough arch support, flat feet, weight gain, foot/leg weakness, increased distance/time of exercise/doing too much too soon.
 - b) It is often a combination of multiple factors.
- *Treatment: The majority of plantar fasciitis cases can be treated without surgery. Your podiatrist can help give you the best treatment for your pain.*
 - a) Treatment is directed at reducing stress to the plantar fascia and decreasing inflammation.
 - b) Home therapy can include rest, ice, massage, proper shoes, arch support, and stretching.
 - c) If home therapy fails, other options can include anti-inflammatory medications, steroid injections, physical therapy, immobilization, splints, orthotics, or extracorporeal shockwave therapy.
 - d) In a minority of cases, when all these treatments fail, surgical intervention may become necessary.
- *When should you go see your podiatrist for plantar fasciitis?*
 - a) If you have heel pain that has been present for over 1–2 weeks despite home treatment;
 - b) If the heel pain is causing you to limp or impacting your ability to walk/exercise; or
 - c) If you have a sudden sharp pain in your heel after an injury (this may not be plantar fasciitis).

OTHER COMMON CAUSES OF HEEL PAIN

- *Achilles Tendinopathy: Achilles Tendinopathy is the inflammation and/or irritation of your Achilles tendon.*
 - a) A tendon is a structure that connects muscle to bone.
 - b) Your Achilles tendon connects the calf muscles to the back of your heel and can become inflamed and irritated.
 - c) Increased stress and strain on the tendon can cause fibers of the tendon to fray and tear.
 - e) Treatment will vary based on the severity and can include: Physical therapy, anti-inflammatory drugs, immobilization, Shockwave therapy, shoe changes, orthotics, or heel lifts.
 - f) Typically, the Achilles tendon is not injected with steroids as steroids can increase the risk of an Achilles tendon rupture.

- *Sever's Disease: Also known as Calcaneal Apophysitis is a common cause of heel pain in kids.*
 - a) The “physis” is the growth plate of the bone and apophysitis is the inflammation and irritation of the growth plate in the heel.
 - b) This can also be caused by a number of factors but some of the most common include: tight-calf muscles; obesity; flat feet; poor footwear; wearing cleats too often and at too young an age; too much/not enough arch support; becoming a single-sport athlete at an early age; and/or playing way too many sports at the same time, nonstop without a break.
- *Heel Spurs: Bone spurs are extra growths of bone that can happen on any bone, but commonly happen near the joint, and where tendons/muscles/fascias/ligaments attach onto the bone.*
 - a) If there is traction and force on the bone from the repeated tug of a muscle/tendon then that can stimulate the bone to grow.
 - b) A heel spur is a bone spur on the heel bone.
 - c) You can get heel spurs both at the back of the heel where the Achilles inserts onto the bone; and on the bottom of the heel where the plantar fascia and the small muscle above it attach onto the bone.
 - d) Heel spurs grow slowly over a period of time. A lot of people get scared when they hear the diagnosis of heel spur, but in reality many people have heel spurs without pain in their heels. Just because you have a heel spur, doesn't mean that the spur is always going to cause you pain.
 - e) Often times the heel spur pain isn't the spur that's the problem. It's the plantar fasciitis or the Achilles tendonitis you are treating that attaches around and within that spur.
 - f) That being said, in a small minority of cases, heel spurs do need to be addressed surgically, but rarely as a first-line treatment.
- *Calcaneal Stress Fractures: Stress fractures are also known as “fatigue fractures” or “hairline fractures.”*
 - a) Stress fractures do not happen suddenly from an injury, they happen slowly overtime due to repeated stress on a bone.
 - b) Stress fractures are more common in the metatarsal bones of your foot, but can happen in the heel bone as well.
 - c) Sometimes stress fractures can happen in areas of chronic tendonitis or fasciitis due to the repeated stress or inflammation in the area.
 - d) As an example, if the forces that are causing a plantar fasciitis aren't addressed and there is increased stress on the heel bone where the fascia attaches, then the bone can start to wear down and become inflamed.
 - e) One way to think of stress fractures is to picture the bone weakening and becoming fatigued and part of it starts to wear and crack, but those cracks are initially so small that they often can't even be seen on an X-ray.
 - f) Often times an MRI is needed to help diagnose a stress fracture.
 - g) If you have had plantar fasciitis for a long time and it hasn't improved with any of the “normal” treatments, then you should talk to your podiatrist to rule out a calcaneal stress fracture.