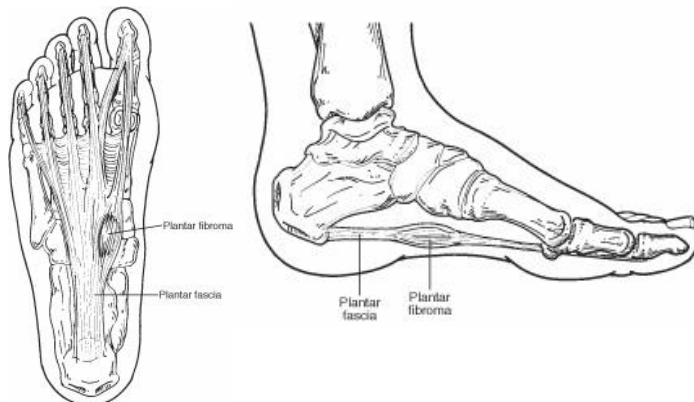


Plantar Fibroma

What is it?

A plantar fibroma is a fibrous knot (nodule) in the arch of the foot. It is embedded within the plantar fascia, a band of tissue that extends from the heel to the toes on the bottom of the foot. A plantar fibroma can develop in one or both feet, is benign (non-malignant), and usually will not go away or get smaller without treatment. It usually appears in the second through sixth decade of life. It is usually slow growing and measures less than an inch in size. Definitive causes for this condition have not been clearly identified.



Symptoms:

Symptoms consist of a painful mass on the bottom of the foot, roughly in the middle of the arch or instep, between the heel pad and the forefoot pad. People who have a plantar fibroma may or may not have pain. When pain does occur, it is often caused by shoes pushing against the lump in the arch, although it can also arise when walking or standing barefoot.

Cause:

The cause is unknown but thought to have a genetic component. Trauma to the foot may be a factor.

Diagnosis:

There are a few conditions that can cause soft-tissue masses in the foot, including cysts, swollen tendons or tendon ruptures, nerve tumors (neurilemmomas) or fat tumors. Foreign body reactions from previous penetrating trauma can also cause a mass in the bottom of the foot, as can an infection. To diagnose a plantar fibroma, Dr. Williams will examine the foot and press on the affected area. Sometimes this can produce pain that extends down to the toes. An MRI or biopsy may be performed to further evaluate the lump and aid in diagnosis.

Treatment Options:

Non-surgical treatment may help relieve the pain of a plantar fibroma, although it will not make the mass disappear. Dr. Williams may select one or more of the following non-surgical options:

- **Steroid injections.** Injecting corticosteroid medication into the mass may help shrink it and thereby relieve the pain that occurs when walking. This reduction may be only temporary and the fibroma could slowly return to its original size.
- **Orthotic devices.** If the fibroma is stable, meaning it is not changing in size, custom orthotic devices (shoe inserts) may relieve the pain by distributing the patient's weight away from the fibroma.
- **Physical therapy.** The pain is sometimes treated through physical therapy methods that deliver anti-inflammatory medication into the fibroma without the need for injection.

- **Topical verapamil.** Topical verapamil has shown good potential for reducing both the size and pain level associated with plantar fibromas.

Recovery:

If the mass increases in size or pain further evaluation is needed. Surgical treatment to remove the fibroma is considered if the pain persists following non-surgical approaches.

Surgical removal of a plantar fibroma may result in a flattening of the arch or development of hammertoes. Orthotic devices may be prescribed to provide support to the foot. Due to the high incidence of recurrence with this condition (up to 65%), continued follow-up is recommended.