

Orthopaedic Observations

A Matter of Medicine...

TM Pending

Plantar Fasciitis

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Plantar fasciitis or pain in the bottom of the foot is a common problem affecting people of all age groups, usually between the ages of 40-70. The cause is often unknown. Obesity is believed to be a contributing factor. Painful inflammation develops because of repetitive microtrauma at the origin of the plantar fascia that causes a traction

periostitis and microtears. Entrapment of the nerve to abductor digiti quinti, a branch of the lateral plantar nerve, is another frequent cause of pain. The much maligned heel spur is not the actual cause of pain in this condition.

The onset of pain localized to the plantar medial heel region is usually gradual. Pain is typically worse upon first arising. Things gradually improve after the first few steps but the pain typically worsens and becomes more aching later in the day. When nerve entrapment is present, the discomfort may radiate proximally and distally.

Physical examination reveals pain at the underside of the heel. The plantar fascia should be palpated on the stretch to find the source of the pain as well as for nodules or palpable defects. A positive Tinel's test suggests nerve entrapment. Standing AP and lateral x-rays should be obtained to assess the alignment of the foot as well as the presence of calcifications. A bone scan is helpful to identify the characteristic uptake at the origin of the plantar fascia and also to rule out a stress fracture pattern.

Treatment is multifaceted. Anti-inflammatory medication, rest, and ice massage to the painful area help reduce the inflammatory process. Patients should be instructed in plantar fascia stretching exercises. Physi-

cal therapy for stretching and strengthening of the plantar fascia, ultrasound and iontophoresis is also very helpful. Orthotics such as arch supports with well-cushioned heels or heel cups should be employed. Plantar fascia night splinting helps prevent contractures that worsen symptoms. Recalcitrant cases can be treated with anesthetic/corticosteroid injections to the area of point tenderness. If pain persists despite these measures, short leg cast immobilization for 6-8 weeks may help resolve symptoms. Surgical treatment is reserved for those patients unresponsive to all of the above measures.

Dr. Iorio spent three years in undergraduate studies at Cornell University before acceptance to Medical School at the Albert Einstein College of Medicine in New York City. Dr. Iorio began his medical career in service to our country for nine years as an Officer in the United States Naval Reserve. He served tours of active duty at the Naval War College in Newport, Rhode Island and at the National Naval Medical Center in Bethesda, Maryland. It was at the National Naval Medical Center where Dr. Iorio decided to pursue a career in Orthopaedic Surgery.

Dr. Iorio completed his orthopaedic residency at the University of Medicine and Dentistry of New Jersey where he was appointed Administrative Chief Resident and was responsible for supervising and directing all residents. He subsequently completed a Fellowship in Foot and Ankle Surgery at the Lahey Clinic in Burlington, Massachusetts. He has practiced all aspects of General Orthopaedic Surgery, but has also had extensive experience in Spine Surgery and Surgery of the Foot and Ankle. He has published original research on Ankle Replacement Surgery as well as review articles addressing reconstructive forefoot surgery. Dr. Iorio has also developed expertise in treatment of Occupational Orthopaedic Injuries.

Dr. Iorio is available for emergent and non-emergent orthopaedic care on a daily basis and is the daytime on-call physician for The Orthopaedic Group, LLC.