Despite its most common name, **plantar fasciitis** is considered a degenerative pathology rather than a primary inflammatory condition (Rhim 2021). As such, the term **Plantar Fasciopathy** is recommended. This encompasses the more common chronic, degenerative process (fasciosis) and the rare acute, inflammatory presentation (fasciitis).

History

Risk factors (Rhim 2021, Hamstra-Wright 2021)
- Elevated BMI or body mass (mostly in the non-athletic population)
- Activities requiring lengthy weight-bearing
- Decreased ankle dorsiflexion
- Decreased first metatarsophalangeal joint extension
- Increased plantarflexion range of motion
- Decreased foot muscle volume

Complaint
- Medial heel pain or plantar foot pain.
- Less commonly posterior heel pain
- Often worse in AM (first few steps of the day) or when first rising from sitting.
- More painful after periods of rest or non-weight bearing.
- Exacerbated by weight bearing activity.
- Often gradual onset or chronic.

Physical Examination Findings

Observation
- Gait may be shuffling or limping, especially first few steps
- May walk on lateral aspects of feet to avoid pain

ROM
- Possible decreased and/or painful dorsiflexion (active or passive)
- Possible decreased SROM of talus, calcaneus
- Possible decreased extension of the 1st MP joint

Palpation
- Tenderness of medial tubercle of calcaneus
- Fibrosis, tenderness of PF
- HT of intrinsic foot muscles
- Concurrent HT of gastrocnemius, soleus, tibialis posterior

Orthopedic
- Windlass Test (passive big toe ext while weight bearing) may be positive
- Essentially, rule out other dx (Calcaneal stress fx, Achilles tendinopathy)
- Negative Heel squeeze

Ancillary Tests

Usually not needed, Dx with Hx/PE.
- Ultrasound may show thickening of PF, but not needed for diagnosis.
- Unnecessary imaging may lead to catastrophizing.

X-rays may decrease suspicion of stress fracture or show concurrent calcaneal spurring. Spurs may cause pain independently of PF. Spurs are somewhat more likely to occur in those with PF but are also common in asymptomatic individuals. No causative relationship has been established. (Moroney 2014, Okçu 2023)

Treatment Options

Can Usually Be Treated Conservatively. Goal is to create favorable conditions that allow it to heal.
- CMT – improve foot and ankle mobility
- STM – address HT and fibrosis of tissues as tolerated (manual, IASTM)
- Consider support – taping, orthotics to temporarily offload PF. Evaluate footwear. Consider night split.
- Therapeutic exercise – strengthen intrinsic foot muscles, calf muscles. Improve proprioception and neuromuscular control. Ex) Slow heel raises with rolled towel under toes.
- Laser therapy for pain relief
- Shockwave therapy to promote healing
- Home care – self-massage, esp. in AM before rising. Ice for pain relief PRN. Frequent stretching of PF and related muscles.
- Activity modification - consider indoor footwear, evaluate walking habits and standing surfaces.

Common Tx Duration
- Varies with severity and chronicity.
- Consider referral if not improving over 6-8 weeks
- May require months - ok as long as patient is progressing.

Options For Recalcitrant Cases
- Immobilize with boot temporarily.
- Refer for PRP or corticosteroid injections.
- Refer for fasciotomy (surgical).

Potential ICD 10 Codes

- **M79.673** = Unspecified Foot Pain
- **M72.2** = Plantar Fasciitis/Plantar Fascial Fibromatosis. This is commonly used by practitioners and listed in ICD databases but may refer more specifically to Fibromatosis of the PF, a separate condition.
- **S93.699A** = Traumatic plantar fasciitis (other sprain of foot)

DDX List for this Condition

- Calcaneal stress fracture. Consider for runners, more calcaneal pain.
- Calcaneal bone bruise. More common with single trauma, less gradual onset.
- Strain of intrinsic foot muscle. Often more sudden, less chronic, due to a change of activity or footwear, unusual movement.
- Posterior Tibial Neuropathy (Tarsal Tunnel Syndrome). Similar pain distribution. More likely to have positive Tibial nerve tension test.
- Achilles Tendinopathy. Sometimes concurrent, tissue related via fascia. Evaluate calves, Achilles at the same time.

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