PLANTAR FASCIITIS

 Plantar fasciitis is a painful foot condition caused by inflammation of insertion of the plantar fascia on the medial process of the calcaneal tuberosity.



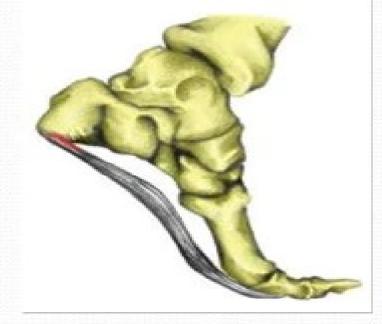
PLANTAR FASCIA

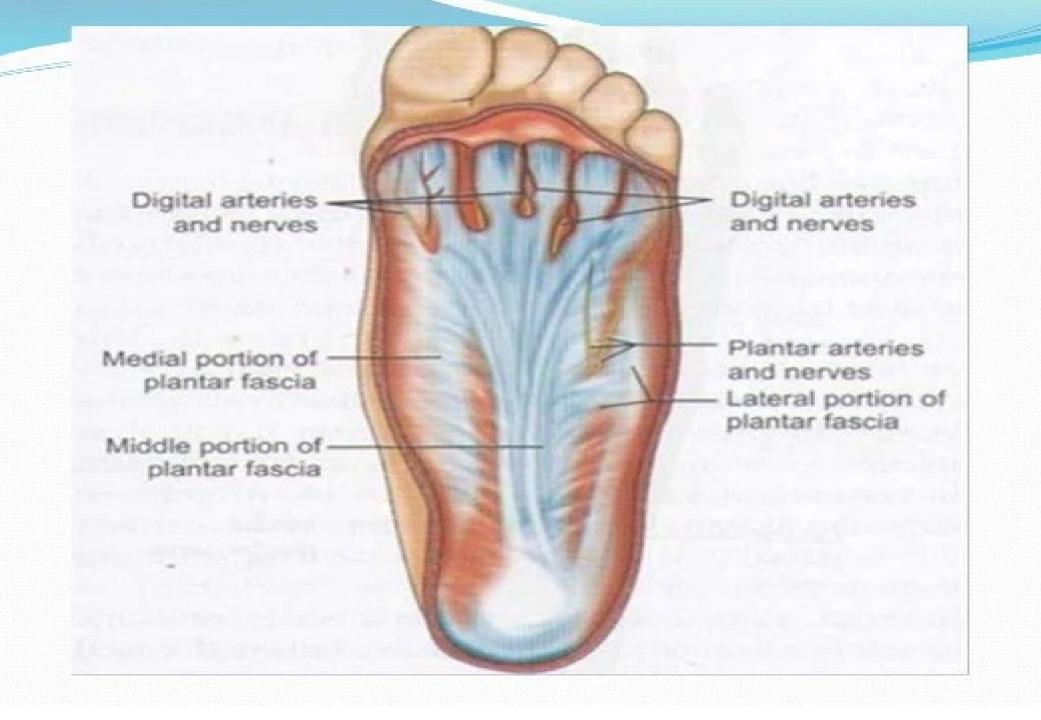
 The plantar fascia is the thick connective tissue which supports the arch on the bottom of the foot

• It runs from the tuberosity of the calcaneus forward to

the heads of the metatarsal bones

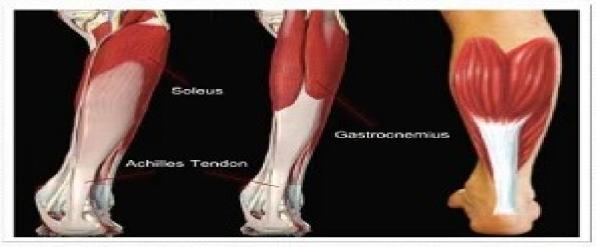
• It is composed of three segments:





ETIOLOGY

- Obesity, Flat Foot, Prolonged standing
- Decreased ankle dorsiflexion
- Congenital- Pes cavus/ Pes planus
- Reiters disease, Ankylosing spondylitis
- Weight bearing activity (dancing, running)
- Fat pad atrophy
- Tight calf muscles



PATHOPHYSIOLOGY

- Chronic overuse leads to microtears in the origin of the plantar fascia
- Repetitive trauma leads to recurrent inflammation and periostitis

C/F

- Sharp heel pain: Insidious onset, often when first getting out of bed, may prefer to walk on toes
- Worse at the end of the day after prolonged standing, relieved by ambulation
- Common B/L

- Tender to palpation at medial tuberosity of calcaneus
- Dorsiflexion of the toes and foot increases may increase tenderness with palpation

Pain under the heel



Same pain in heel after sitting for long time and getting up to walk

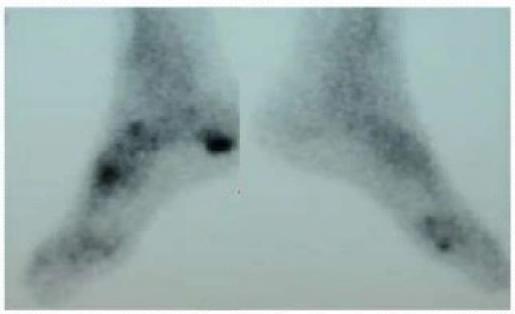
Worsening pain after prolonged standing/walking Severe pain & inability to walk in morning after getting from sleep

Pain gets better after taking few steps

INVESTIGATIONS

- Radiographs
 - often normal, r/o calcaneal stress #
 - may show plantar heel spur
 - weight bearing axial/lat films of hindfoot may show structural changes
- MRI thickening of plantar fascia
- Bone Scan increased uptake
 - can quantify inflammation
 - useful to rule out stress fracture





TREATMENT

NON OPERATIVE

Pain control, Splinting & Stretching

- Plantar fascia and Achilles tendon stretching
- Anti-inflammatories /cortisone injections
- Taping
- Foot Orthosis
 - Cushioned heel pads, pre-fabricated shoe inserts, night splints, walking casts
 - Short leg casts can be used for 8-10 weeks



Modified Foot wear Can help to soothe pain





Shoe inserts

Stretching



TAPING

 Calcaneal taping or low-dye taping used for short-term pain relief. Taping does cause improvement in function.



OPERATIVE:

Perisistent pain after 9 months of failed conservative measures.

- Surgical release with plantar fasciotomy: done open or arthroscopically
- Surgical release with plantar fasciotomy and distal tarsal tunnel decompression