PLANTAR FASCIITIS

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NPTE STUDYCAST
BREWED BY PT PINTCAST

WHAT IS IT?

- Plantar fasciitis is an overuse injury that can be due to new or increased activity, footwear, loading patterns, or all of the above.
- Hallmark sign: pain with walking/weightbearing after periods of rest (sleeping, sitting)
- Plantar fascia extends from medial tubercle of calcaneus to 5 metatarsal heads.
- Primarily influenced by dorsiflexion mobility and forefoot mobility (pronation/supination)
- Patients at risk for developing plantar fasciitis:
  - High BMI
  - Occupations that require prolonged standing with unforgiving surfaces (cement)
  - Runners

SPECIAL TESTS

- Subjective cluster
  - Heel pain with weightbearing after rest, high impact activity, starting a running program or job that requires standing, high BMI
- Observation/Palpation
  - Foot posture/footwear
  - Palpation of medial plantar surface of calcaneus = reproduce symptoms
- Objective Measures
  - Limited DF ROM, rule out achilles tendon pathology with resisted PF
- Windlass Mechanism = ability to tolerate stress of plantar fascia
- Tarsal Tunnel Test = rule out neurodynamics

DIFFERENTIAL DIAGNOSIS

- Tarsal Tunnel Syndrome
- Achilles tendinopathy
- Stress Fracture in calcanus = difficulty weight bearing

TREATMENT EXAMPLES

- Limited dorsiflexion
  - Due to decreased talocrural joint mobility = talocrural posterior joint mobilization
  - Due to decreased gastroc complex length = dorsiflexion stretch
- Increased pronation in weight bearing = taping, orthotics, footwear changes, proprioceptive balance exercicses
- Pain with first steps in AM or weight bearing = night splints, change in footwear, add orthotic, gel heel pad

EXAMPLE QUESTION

A 25 year old female runner presents to the clinic with a history of right heel pain. Upon examination, the patient demonstrates 2 deg of ankle dorsiflexion ROM on the right with her knee extended and 8 deg of ankle dorsiflexion ROM with the knee flexed. What would be the most appropriate initial intervention based on this information?

1. Talocrural joint mobilizations
2. Heel raises
3. Gastrocnemius complex stretching
4. Night splinting

Answer: Gastroc stretching

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