History

21 year old male with worsening left foot pain and popping

Concern for tarsal coalition
Findings

• No coalition seen

• Accessory anterolateral facet of the talus, narrowing the critical angle of Gissane
  – Can be associated with tarsal coalition
  – CT/MR recommended

• No dorsal talar beaking
Accessory Anterolateral Facet

- Anterior/distal extension of lateral process of the talus
  - Articulated w extended facet of ant process of calcaneus

- Painful talocalcaneal impingement
- Associated with rigid flatfoot
- Associated with dorsal talar beaking (29%)

- Surgical removal of this facet can allow for subtalar joint-sparing flatfoot reconstruction
  - Facet excision, peroneal/gastrosoleus lengthening, calcaneal lengthening
Accessory Anterolateral Facet
Findings

• Anteromedial aspect of posterior subtalar joint
  – Irregularity of the articular surface
  – Narrowing of the joint space
  – Subchondral sclerosis

• Accessory anterolateral facet of the talus
Diagnosis

• Extra-articular talonavicular coalition
• Anterolateral facet of the talus
Tarsal Coalition

- Abnormal union of 1/more hind/mid foot bones
  - Osseous (Synostosis)
  - Cartilaginous (Synchondrosis)
  - Fibrous (Syndesmosis)
Tarsal Coalition

• 1% incidence

• 50% bilateral

• 90% talocalcaneal or calcaneonavicular
Tarsal Coalition

- Insiduous, non-specific, variable presentation
  - 8-12 yo in calcaneonavicular
  - 12-16 yo in talocalcaneal

- Pain/stiffness
- Sprains
- Flatfoot
Talonavicular Coalition

- Extra-articular
- Posterior to sustenaculum tali
- Normal middle subtalar joint
Talocalcaneal Coalition

- Fusion of middle articular facet is most common
  - Downward/medial sloping medial facet
  - Hypoplastic sustenaculum tali
  - Talar beak
  - C-sign: Overlapping bone shadows
Talonavicular Coalition

- Posterior facet
  - Uncommon
  - Usually cartilaginous
  - Posteromedial aspect of facet
Talonavicular Coalition

- Anterior facet
  - Very rare
  - Usu associated w middle facet coalition
Bibliography


