

SINUS TARSI

Anatomy and Pathology



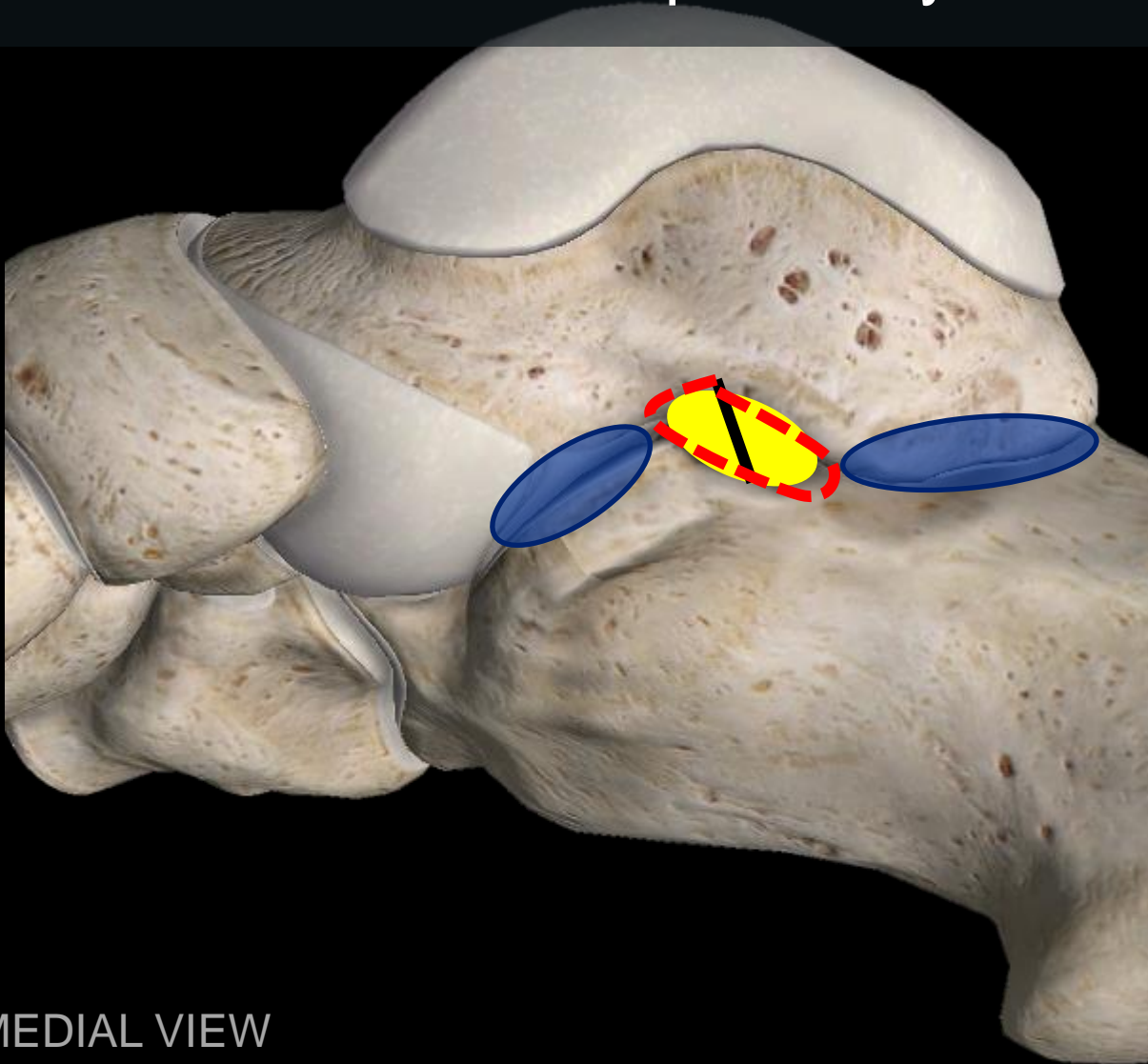
Dr. Marcelo Abreu, Porto Alegre, Brazil



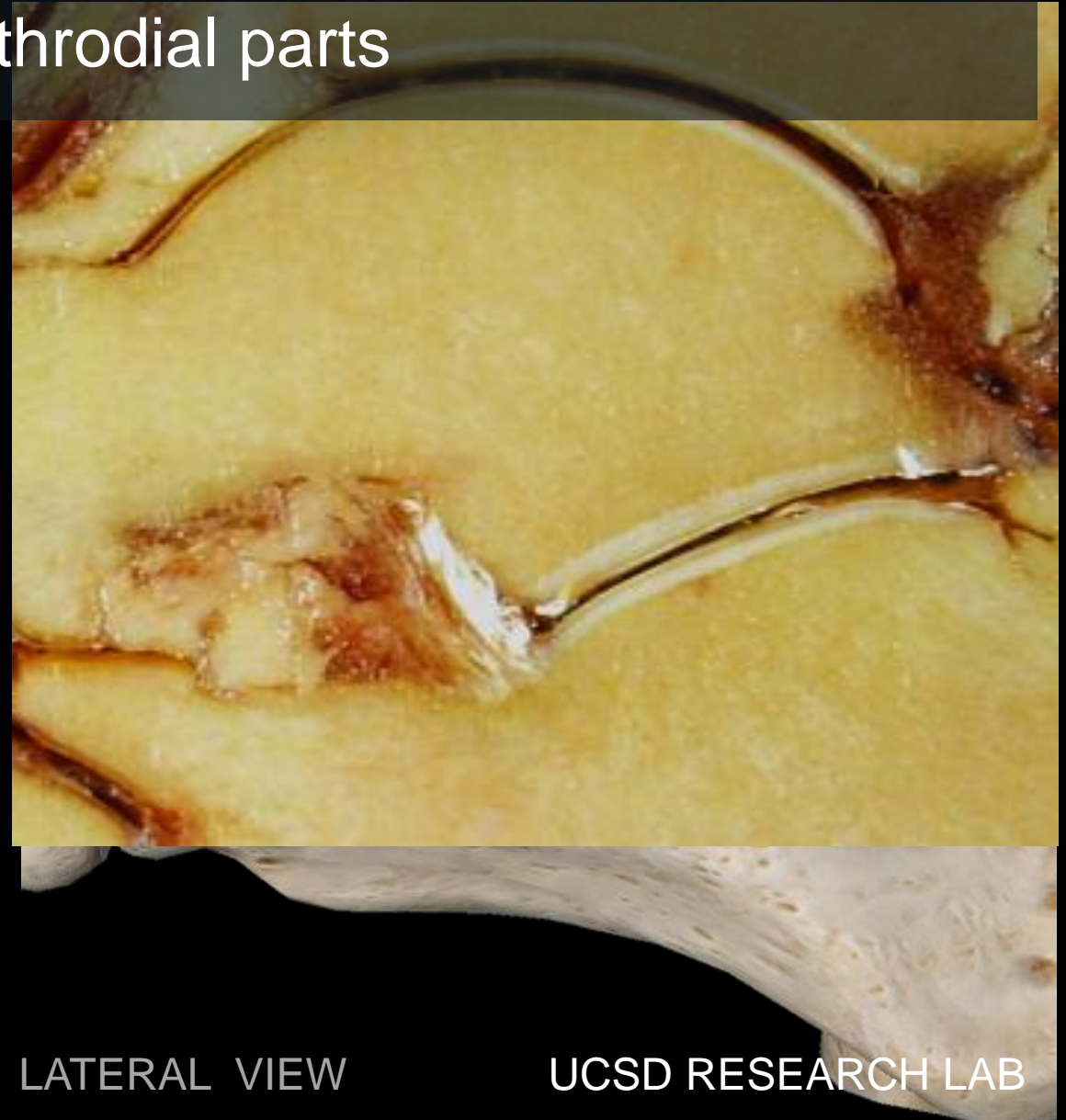
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What is the Sinus Tarsi?

- Subtalar Joint: Composed by 2 Diarthrodial parts

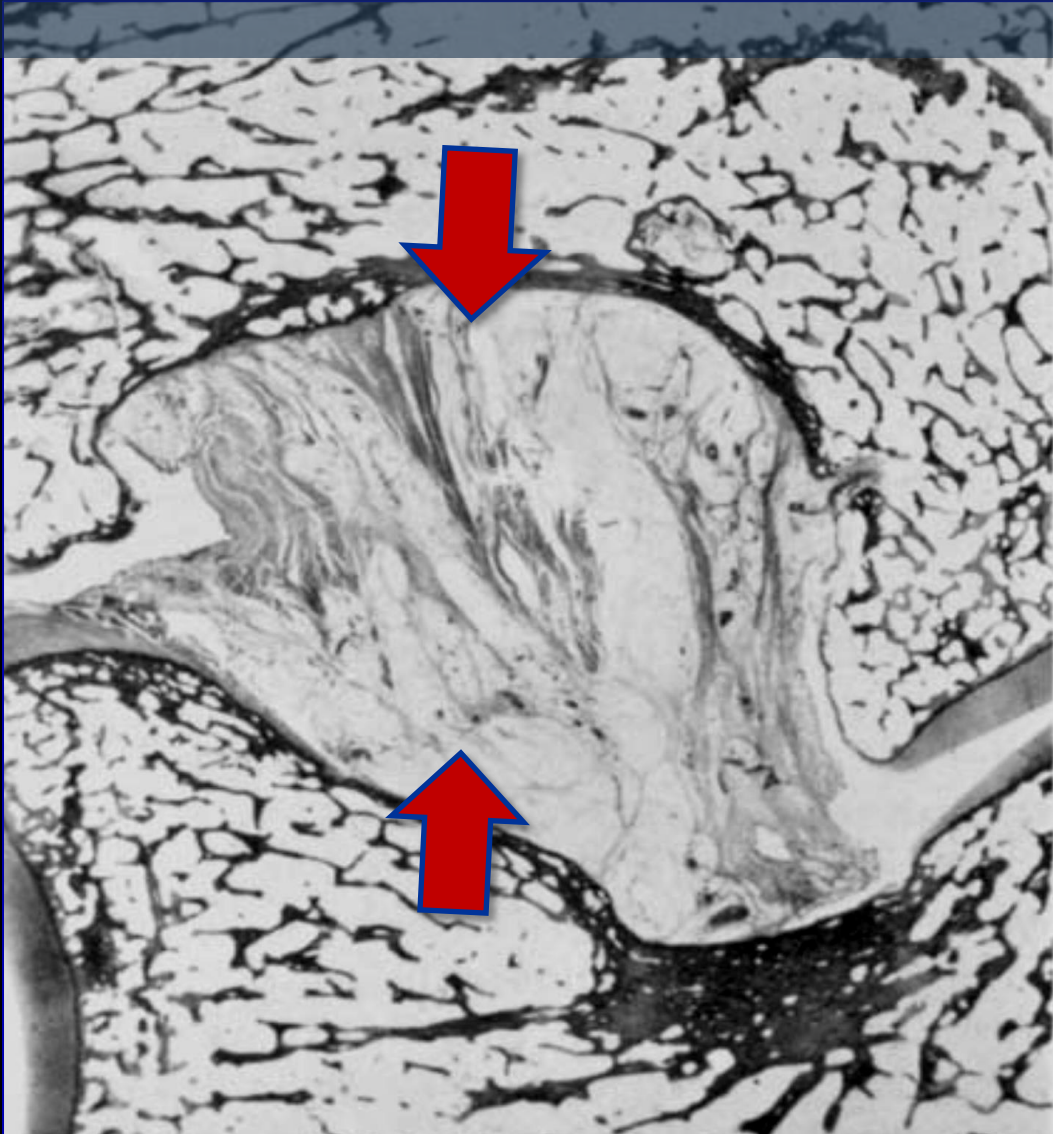


MEDIAL VIEW



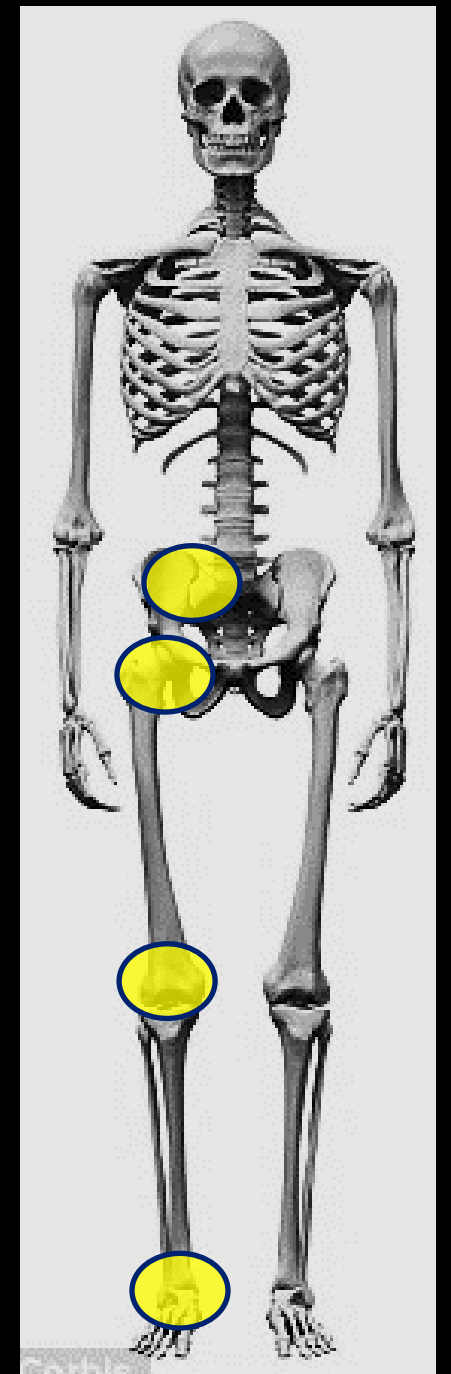
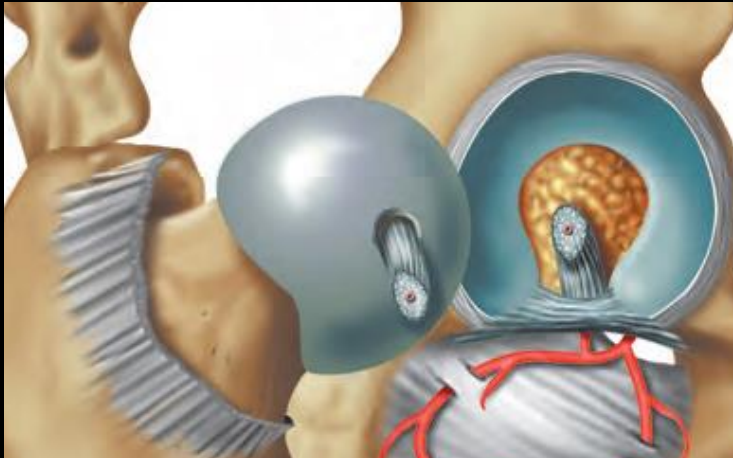
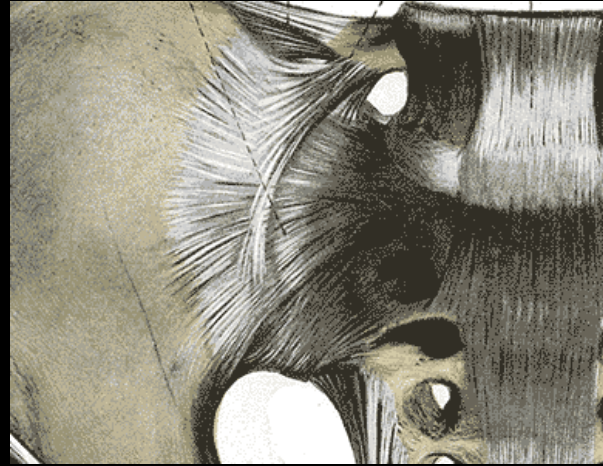
LATERAL VIEW

- FUNCTION: Stability & Proprioception



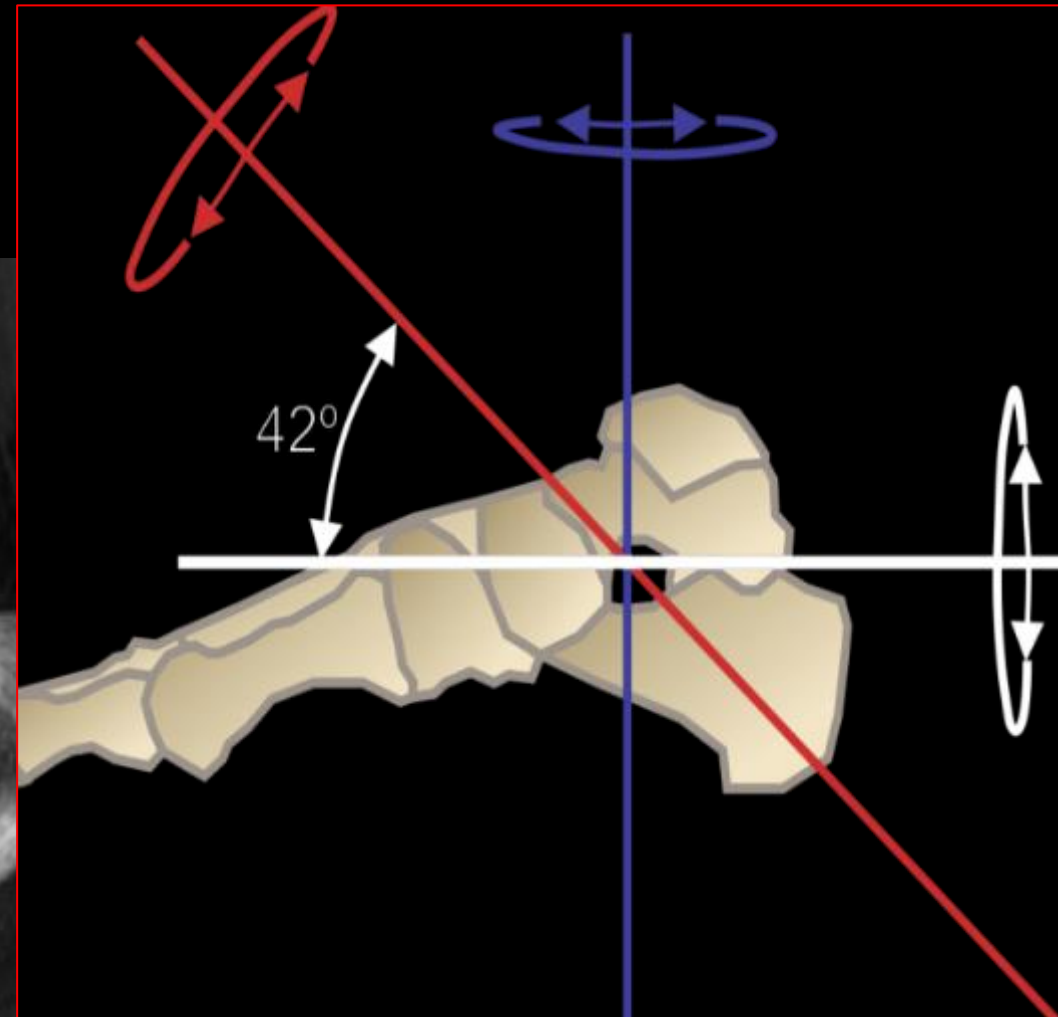
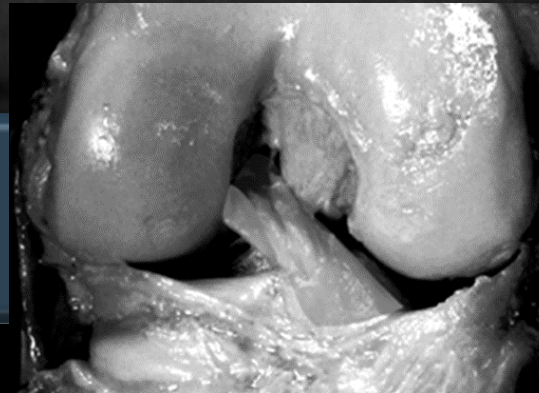
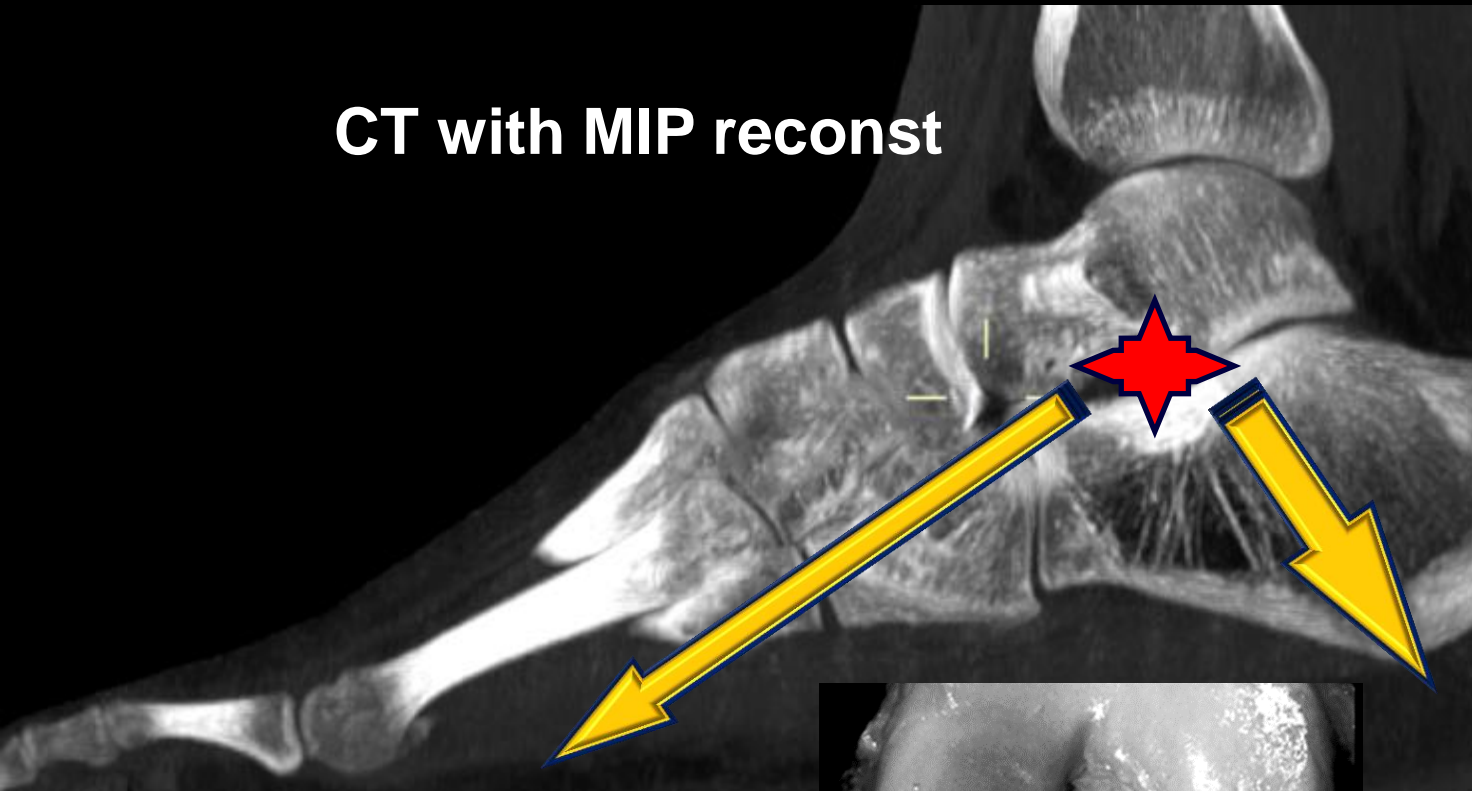
Similar joints with ligamentous part

- Sacroiliac Joint
- Hip
- Knee
- Subtalar



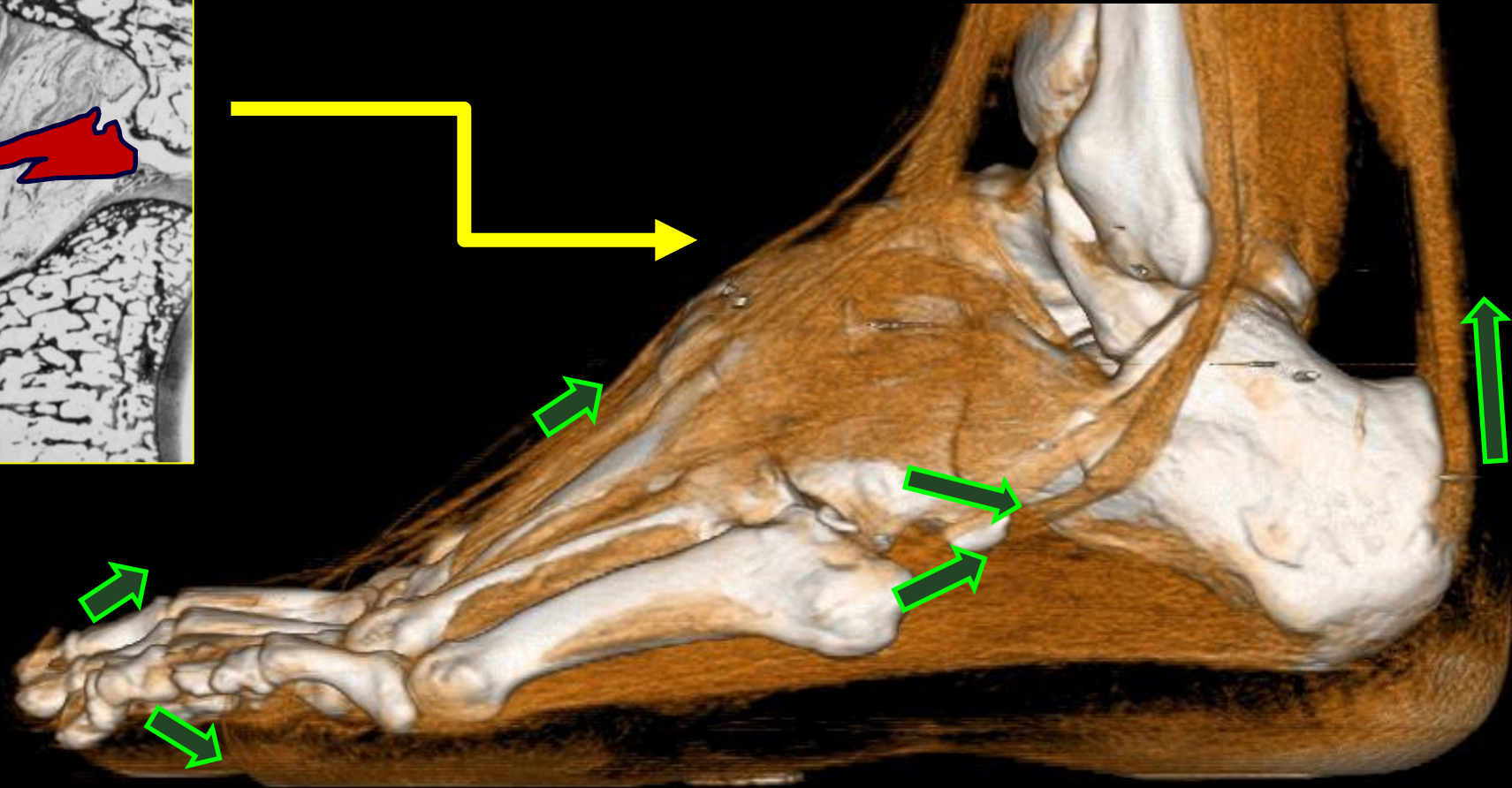
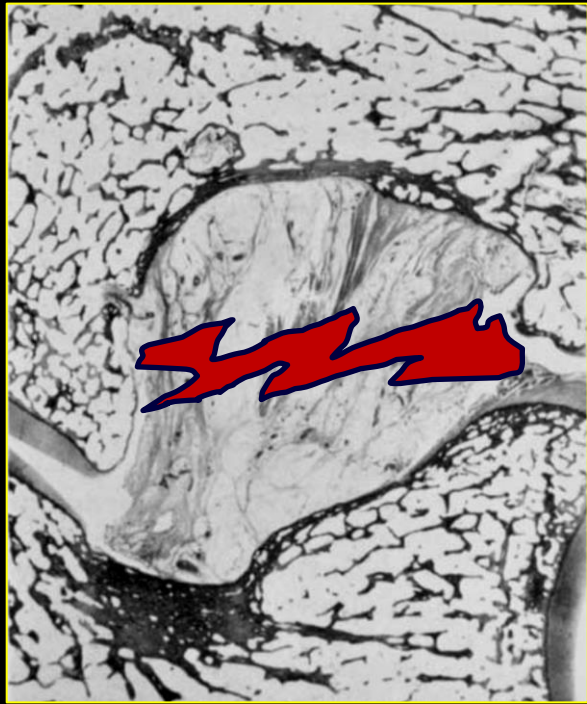
Stability of the Foot

CT with MIP reconst

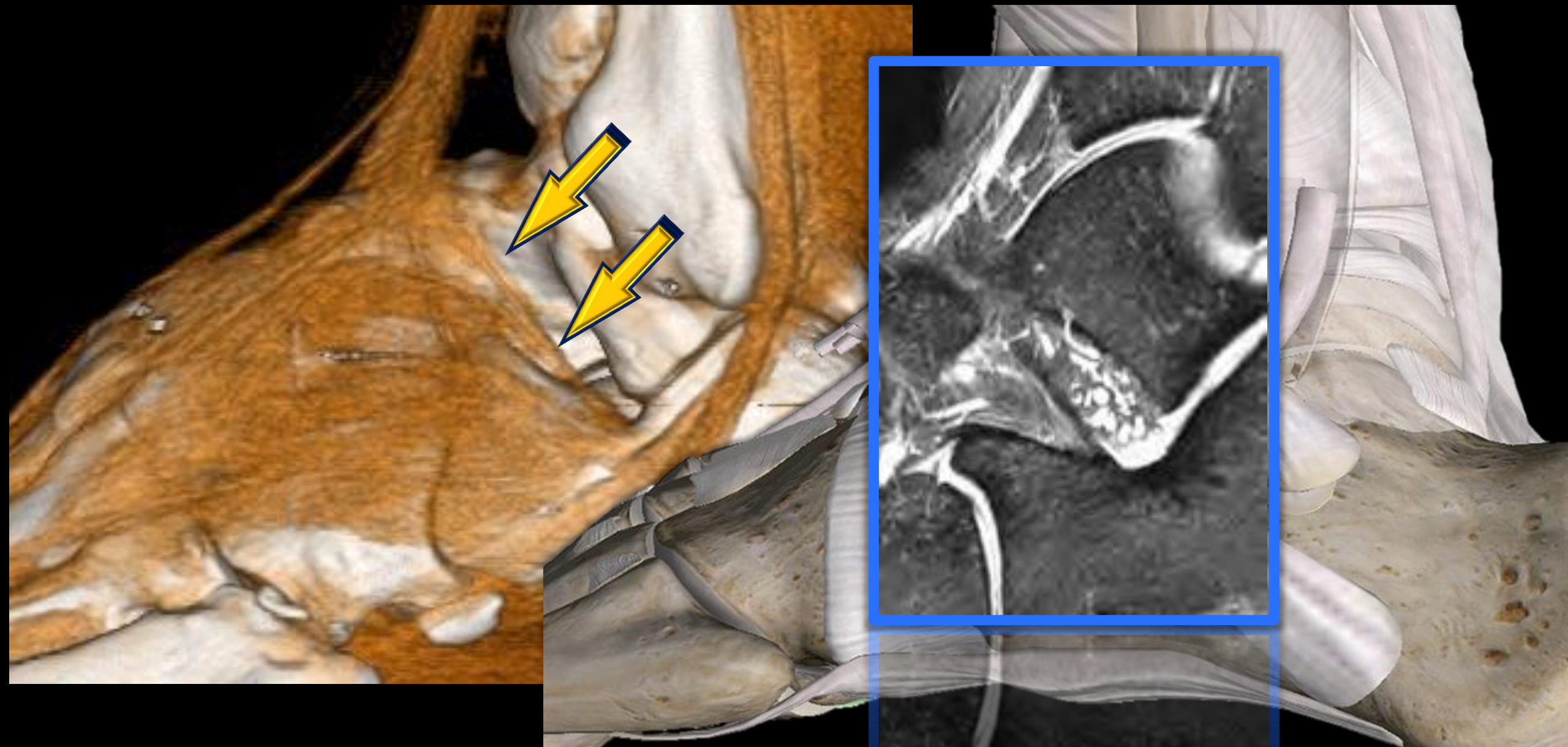


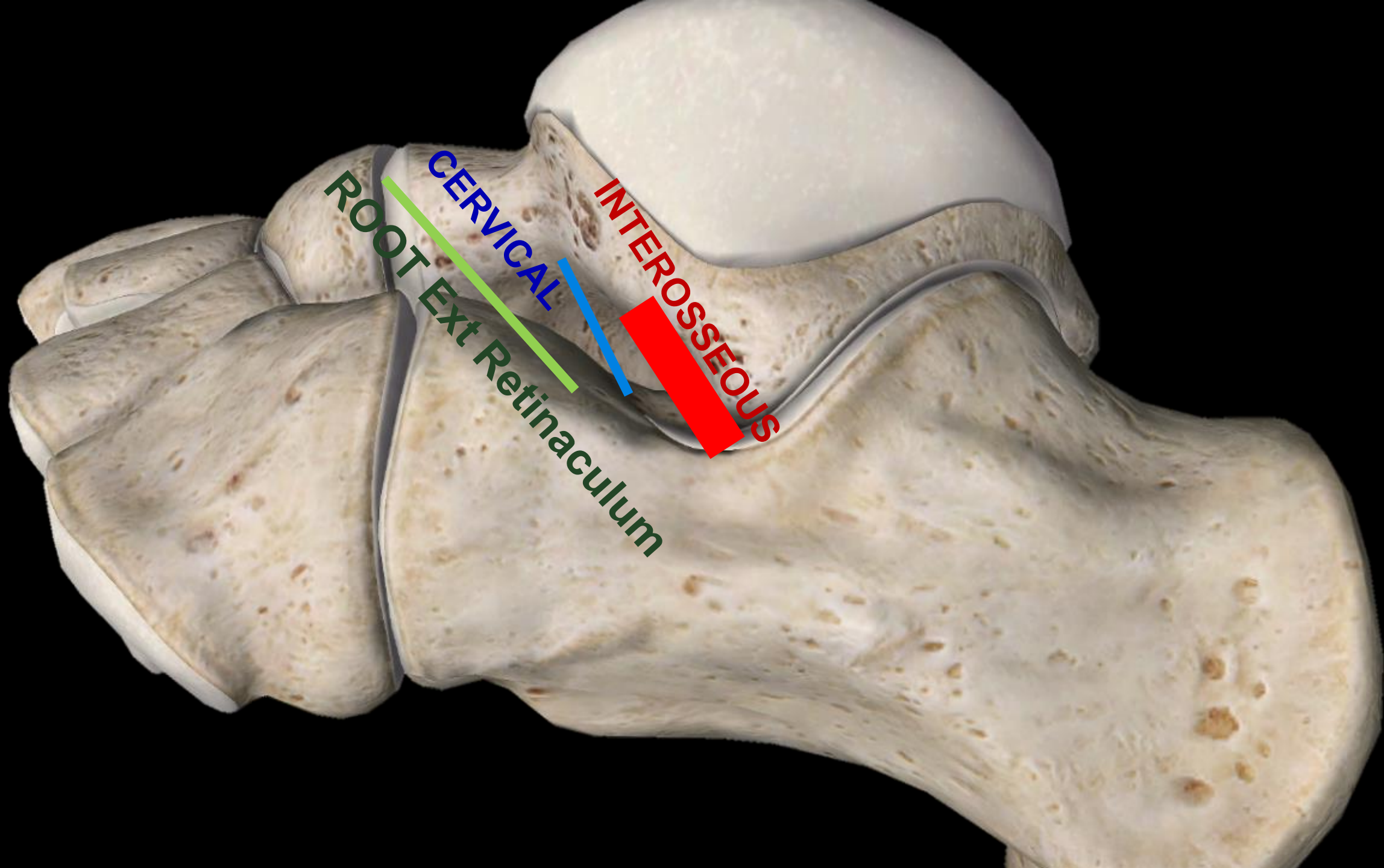
SUPINATION
PRONATION
EXTENSION
FLEXION

PROPRIOCEPTION will give EQUILIBRIUM



ROOT OF THE INFERIOR EXTENSOR RETINACULUM





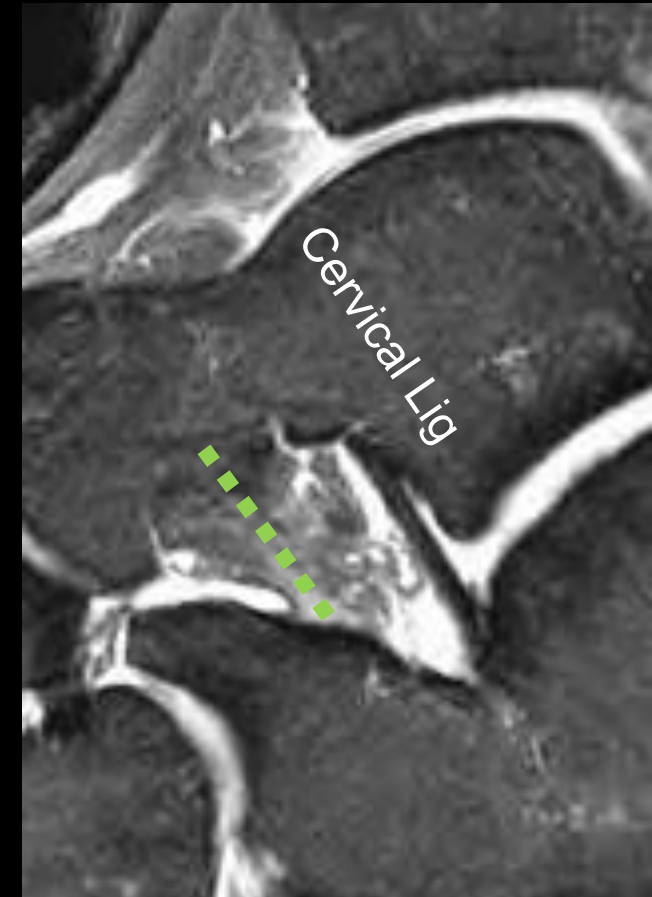
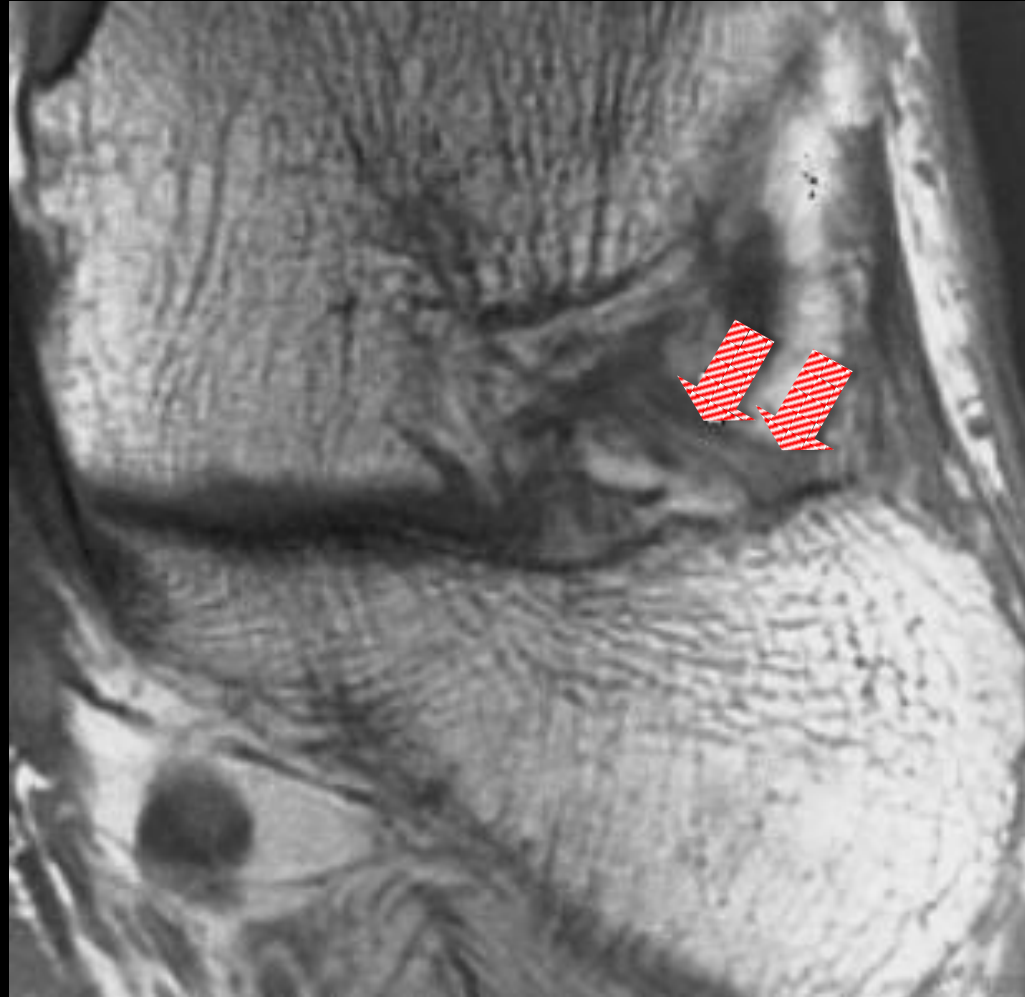
CERVICAL

ROOT Ext Retinaculum

INTEROSSEOUS

CERVICAL LIGAMENT

Also called Fick ligament, the primary function is to **limit the inversion** of the hindfoot



INTEROSSEOUS TALOCALCANEAL LIGAMENT

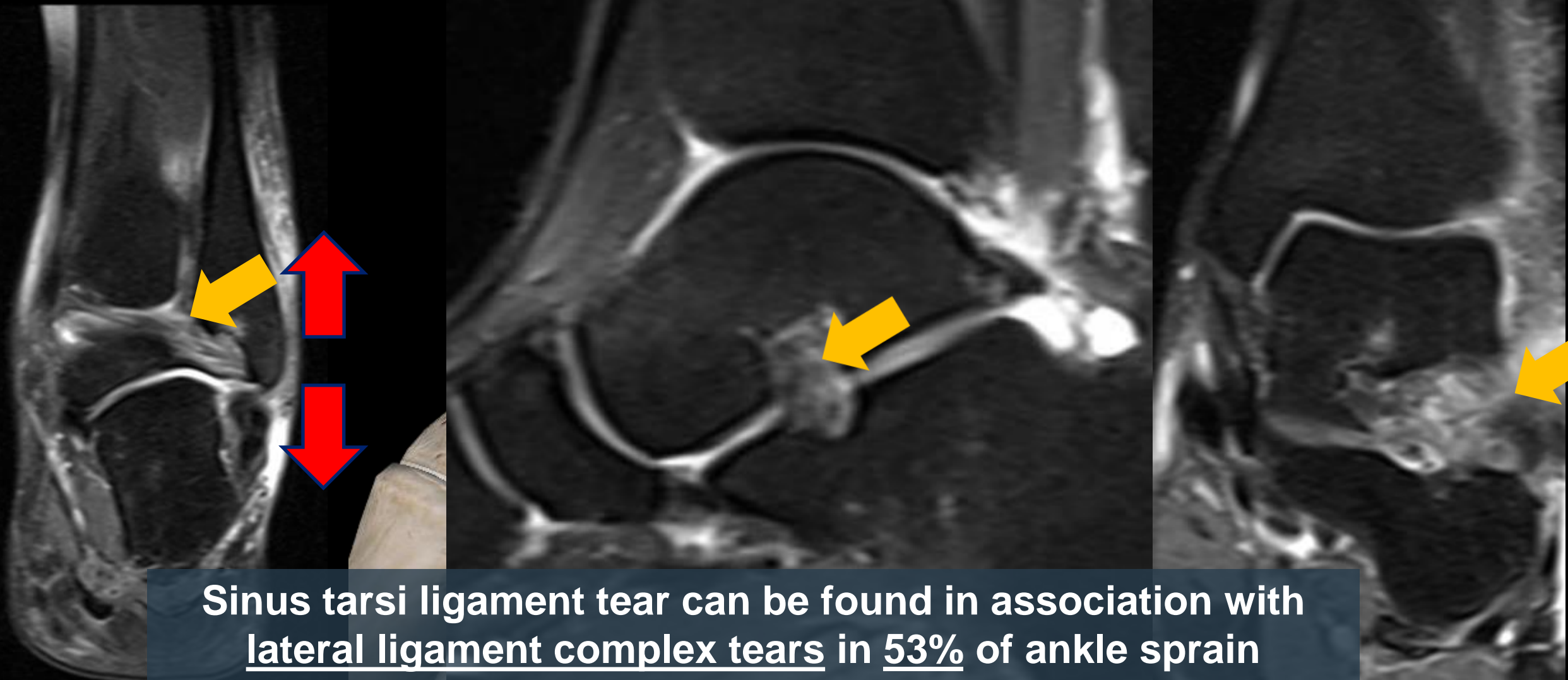
The primary function is to oppose eversion of the foot



Interosseous Ligament

ACUTE LESIONS OF THE SINUS TARSI

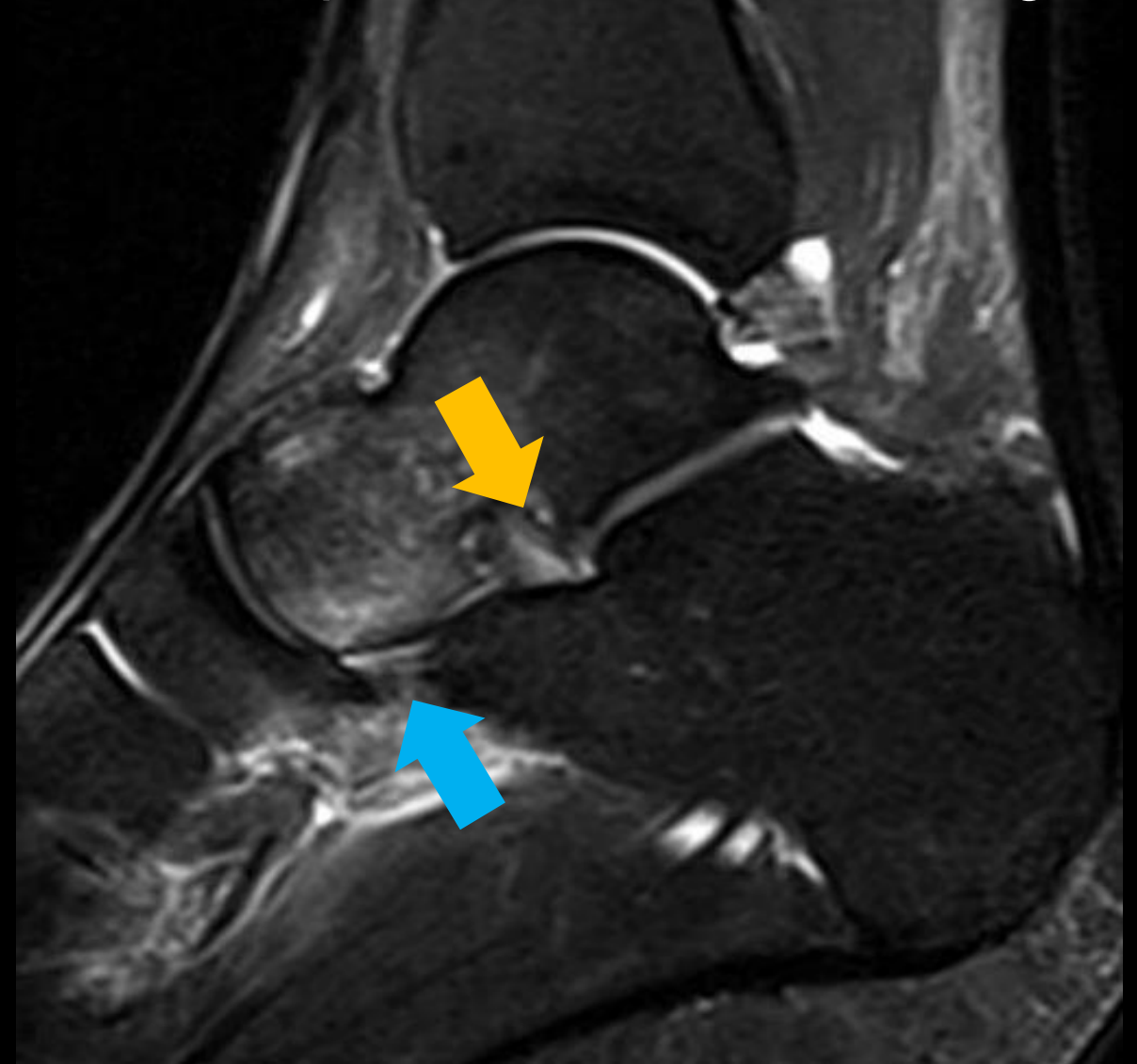
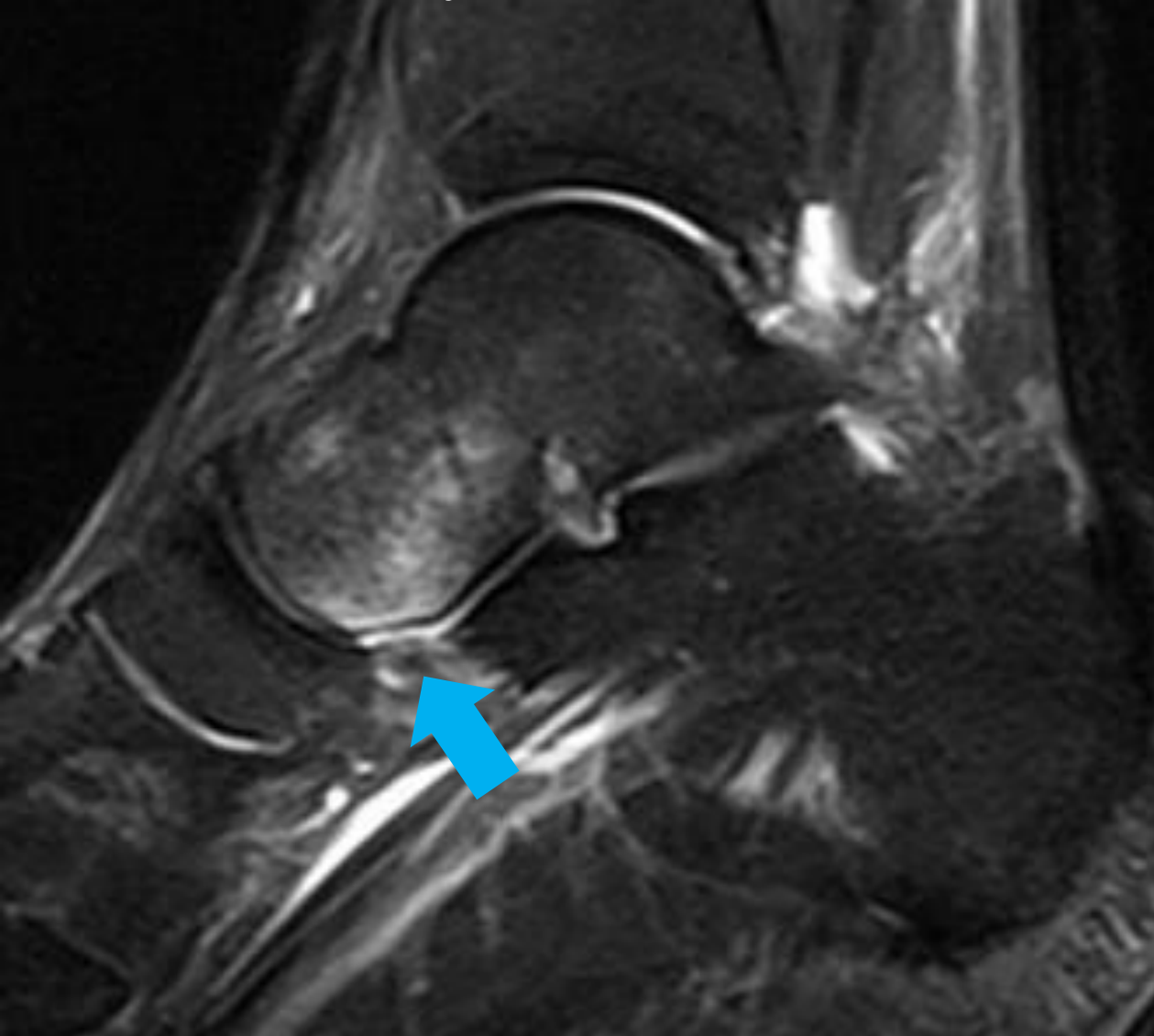
Case 1: 20y, M, Acute Inversion of the Ankle: Sprain of the TaloFib, CalcFib



Sinus tarsi ligament tear can be found in association with lateral ligament complex tears in 53% of ankle sprain

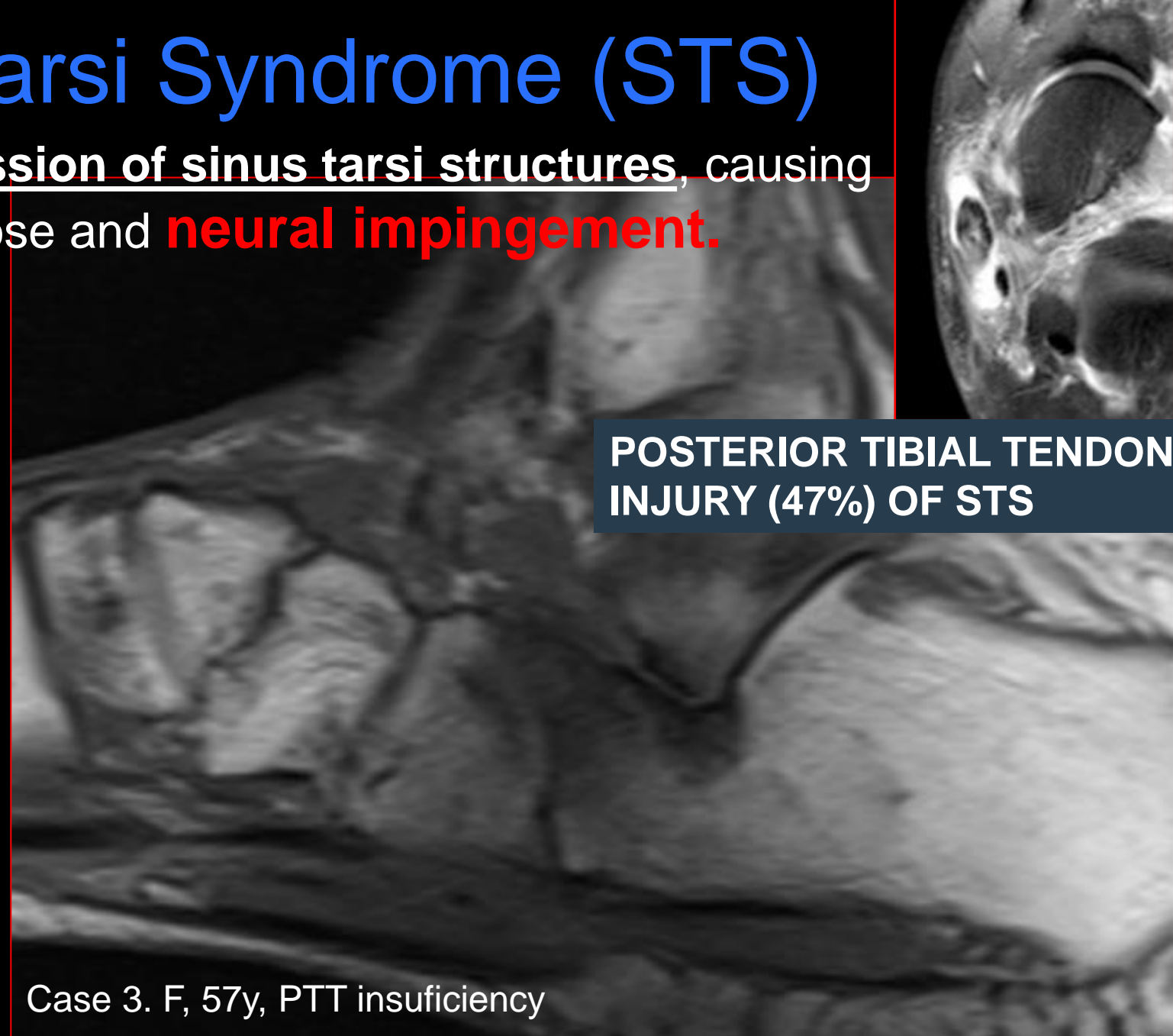
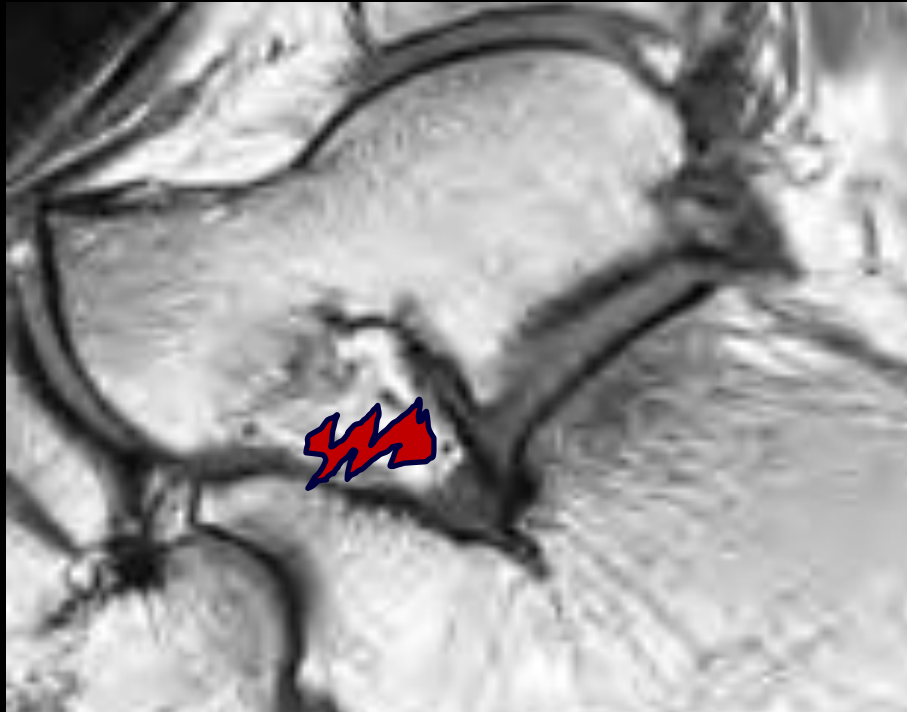
ACUTE LESIONS OF THE SINUS TARSI

Case 2: 24y, F, Acute Eversion of the Ankle: Sprain of the SPRING lig



Chronic: Sinus Tarsi Syndrome (STS)

Conditions that induce compression of sinus tarsi structures, causing inflammatory process with adipose and **neural impingement**.

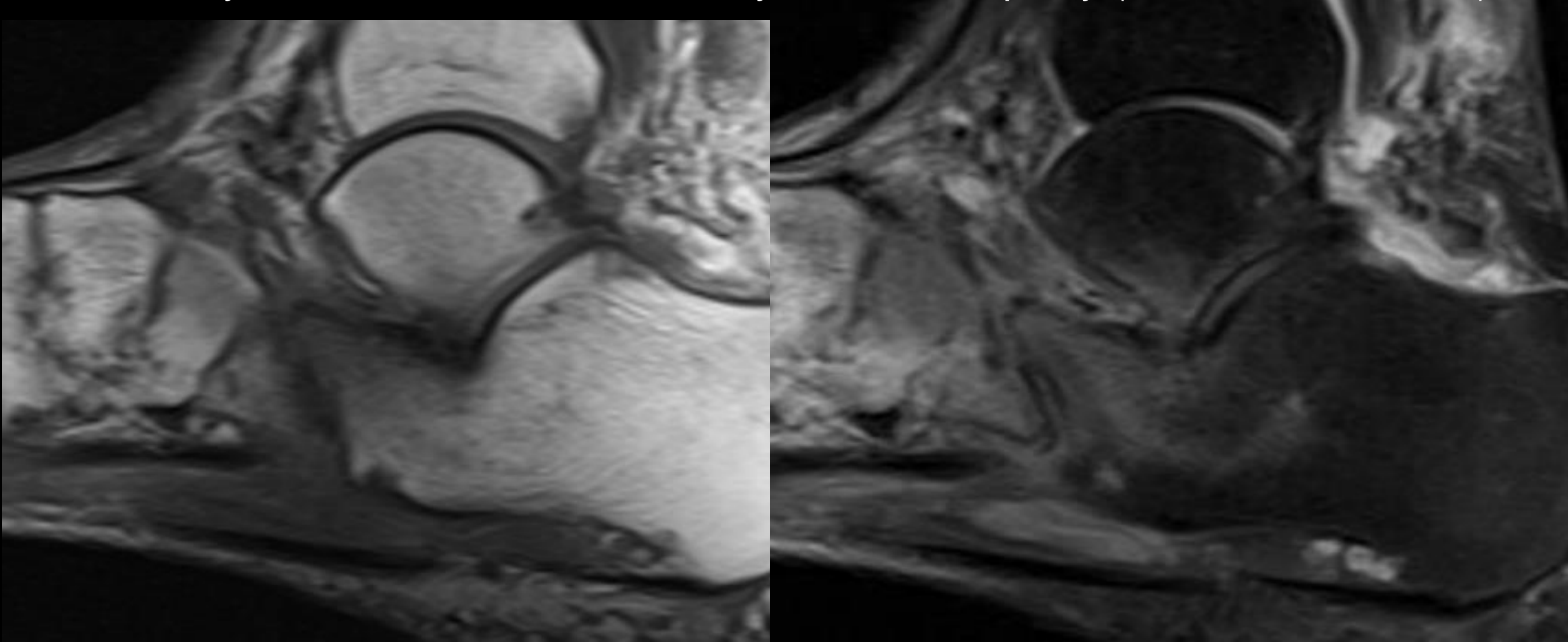


Case 3. F, 57y, PTT insufficiency

Brown, J.E.: The sinus tarsi syndrome. Clin. Orthop., 1960.

Sinus Tarsi Syndrome (STS)

Case 4: 68y, F, Flat Foot, PTT insufficiency, DM2, neuropathy (CHARCOUT JOINT)



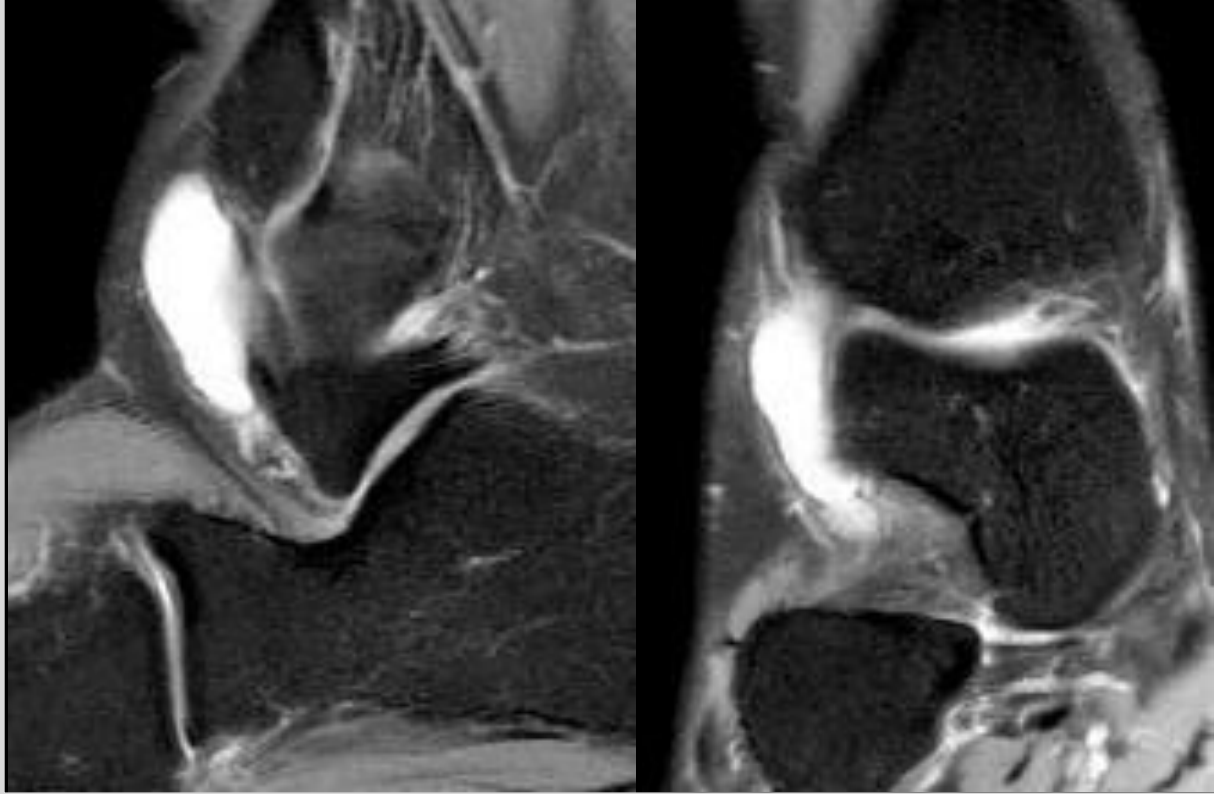
Chronic: Sinus Tarsi Syndrome (STS)

Case 5: 70y, M, chronic pain, Subtalar OA



Other Pathology of Sinus Tarsi

SYNOVIAL/GANGLION CYSTS



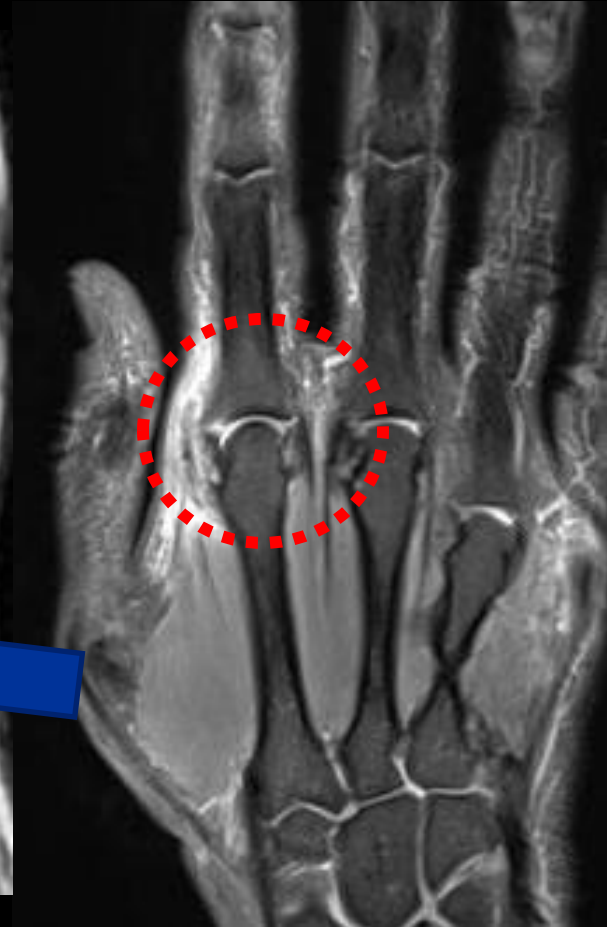
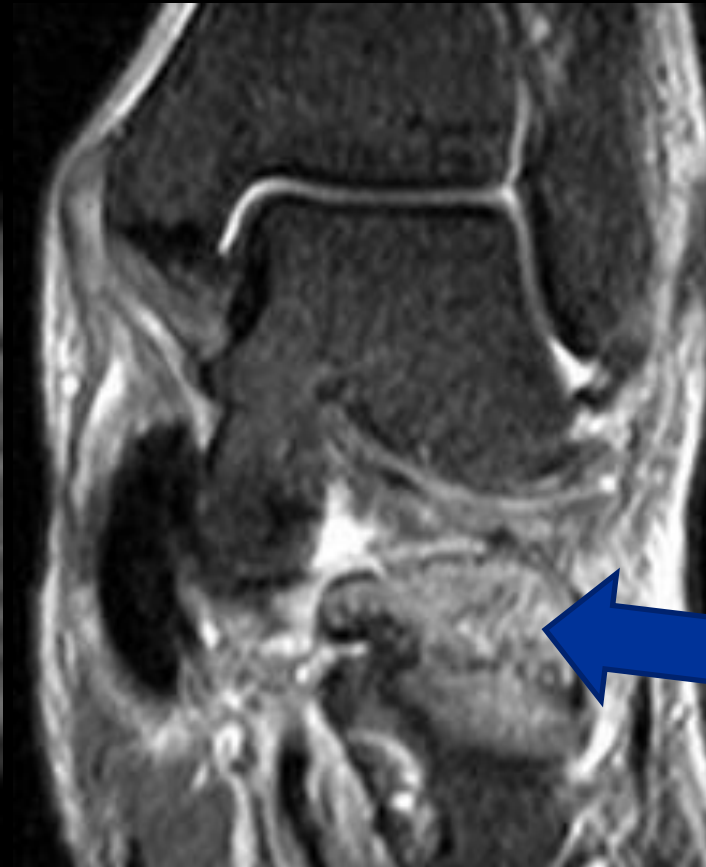
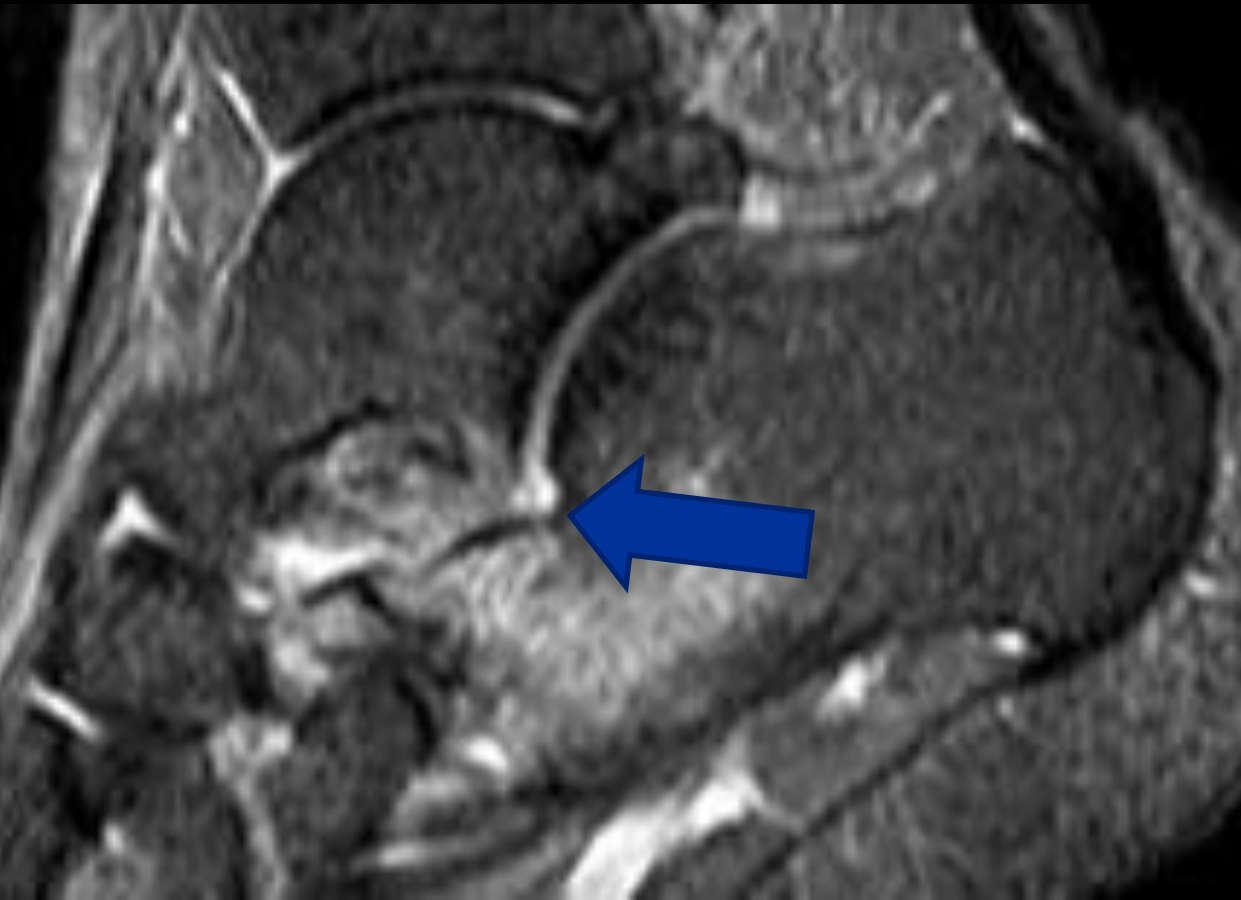
SYNOVIAL OSTEOCHONDROMATOSIS



Other Pathology of Sinus Tarsi :

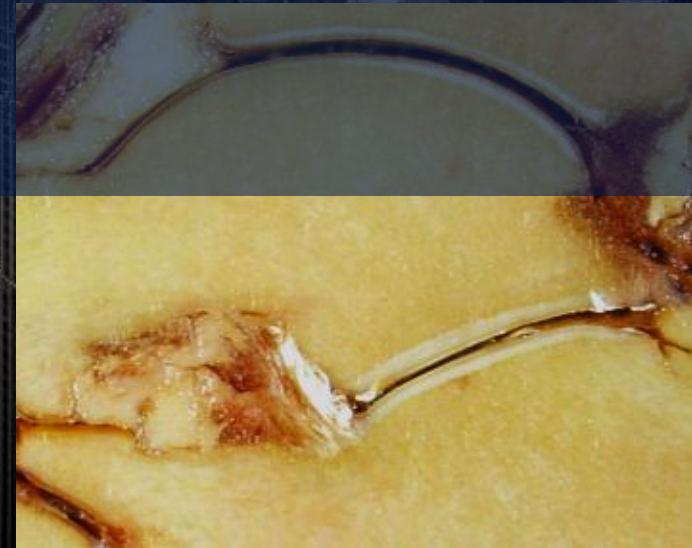
Last Case: M, 36 y, HLAB27 + STS and second digit pain.

Spa: PSORIATIC ARTHRITIS



Summary

- Sinus Tarsi Anatomy (fat, 1 root, 2 ligaments, nerves)
- Acute Lesions: Ankle and Foot Sprains
 - Describe ligamentous tears (partial/complete): prognosis, treat.
- Chronic Lesions: STS (PTT insufficiency)





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THANK YOU!

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