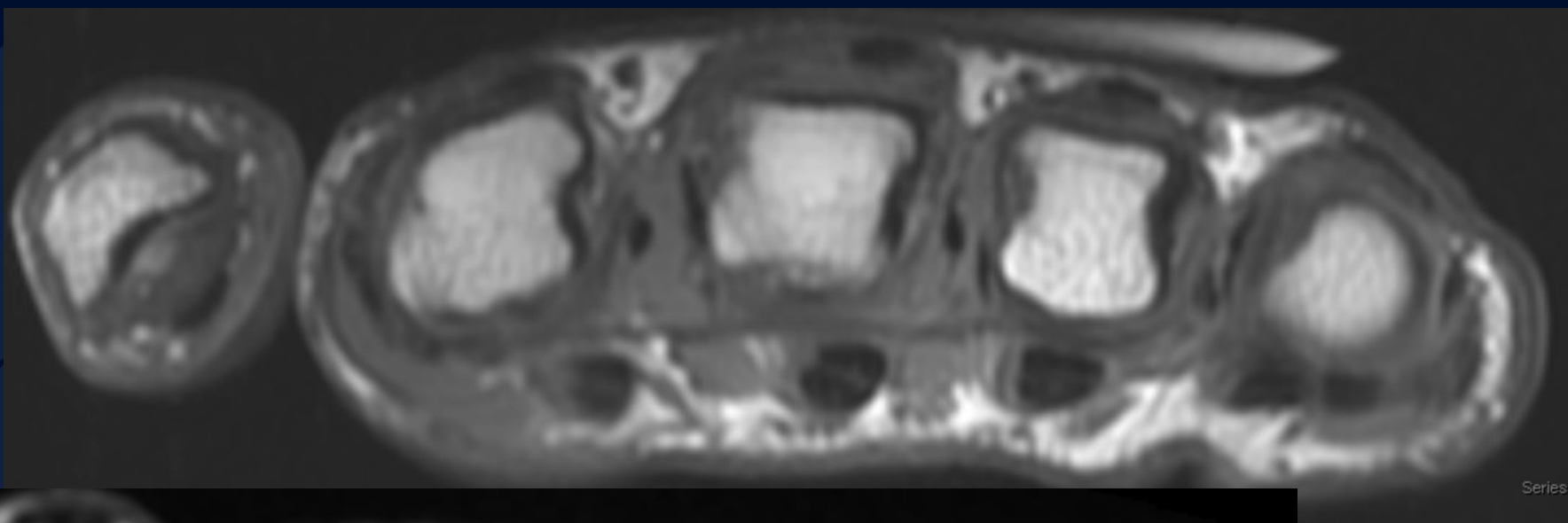


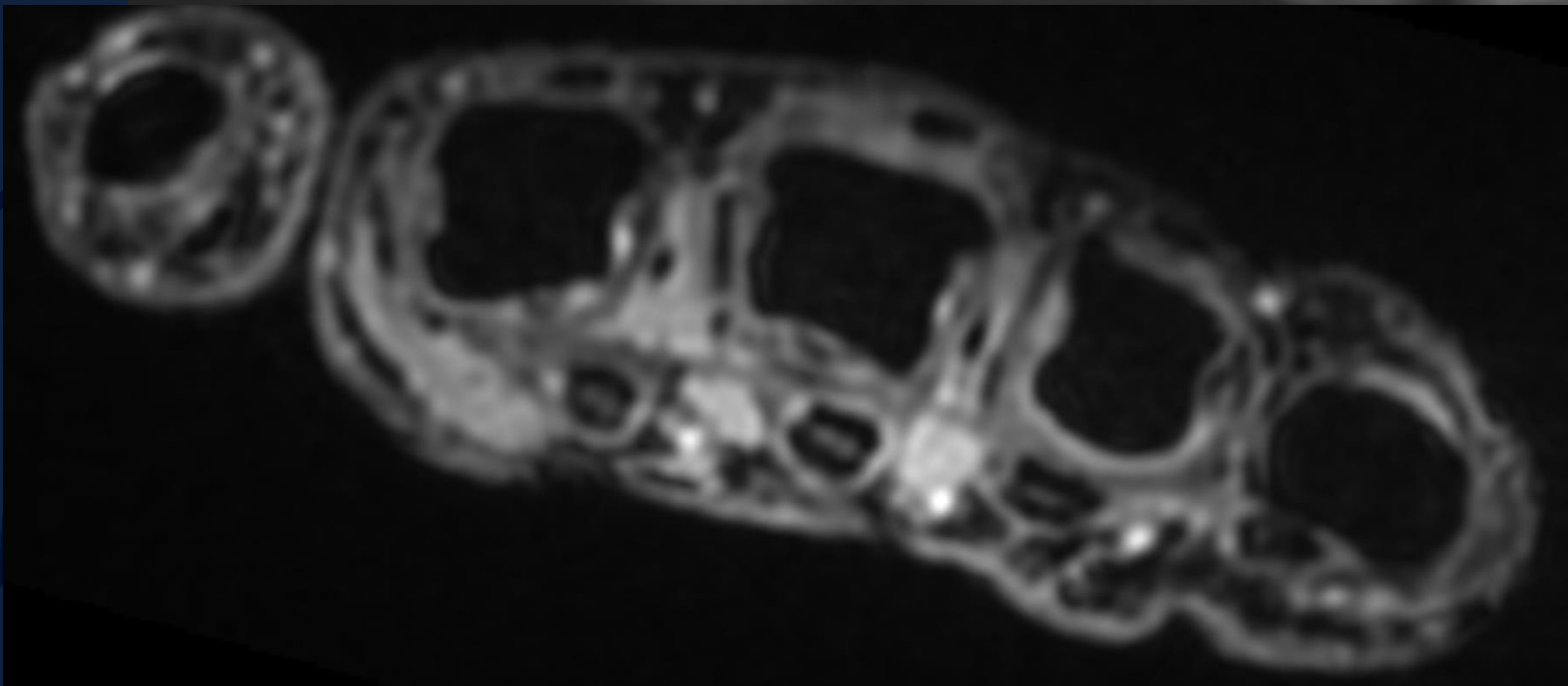
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching off it. The leaf's edge is serrated.

# Hand pain

John J. DeBevits IV, MD



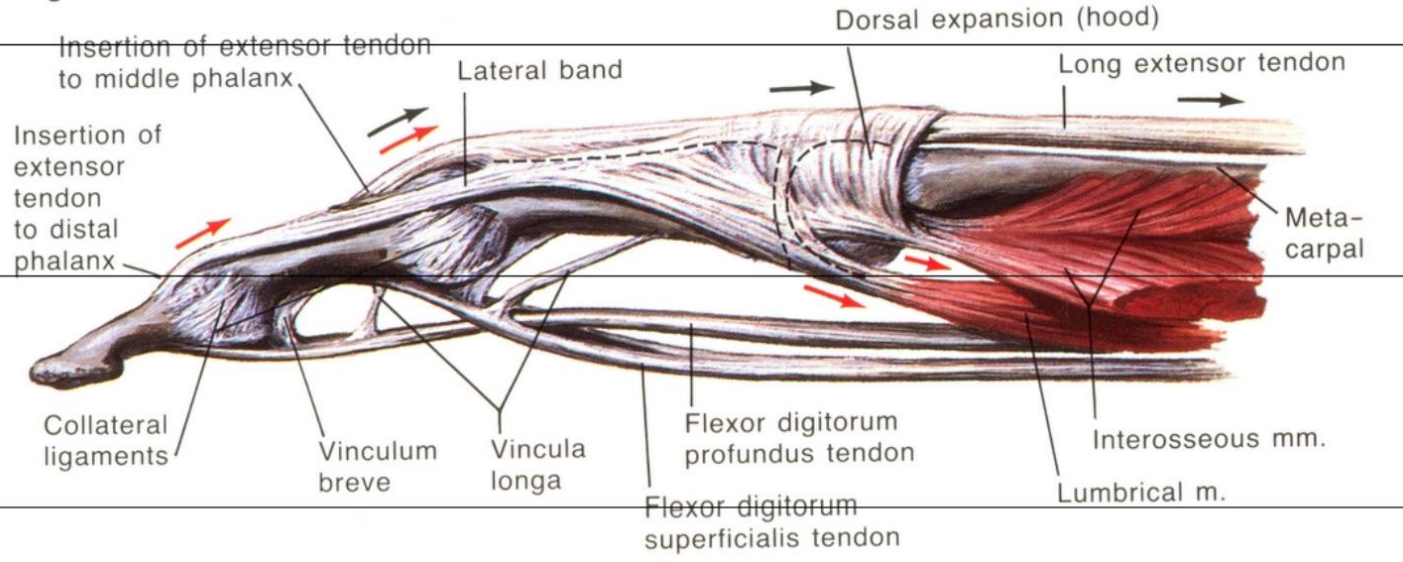
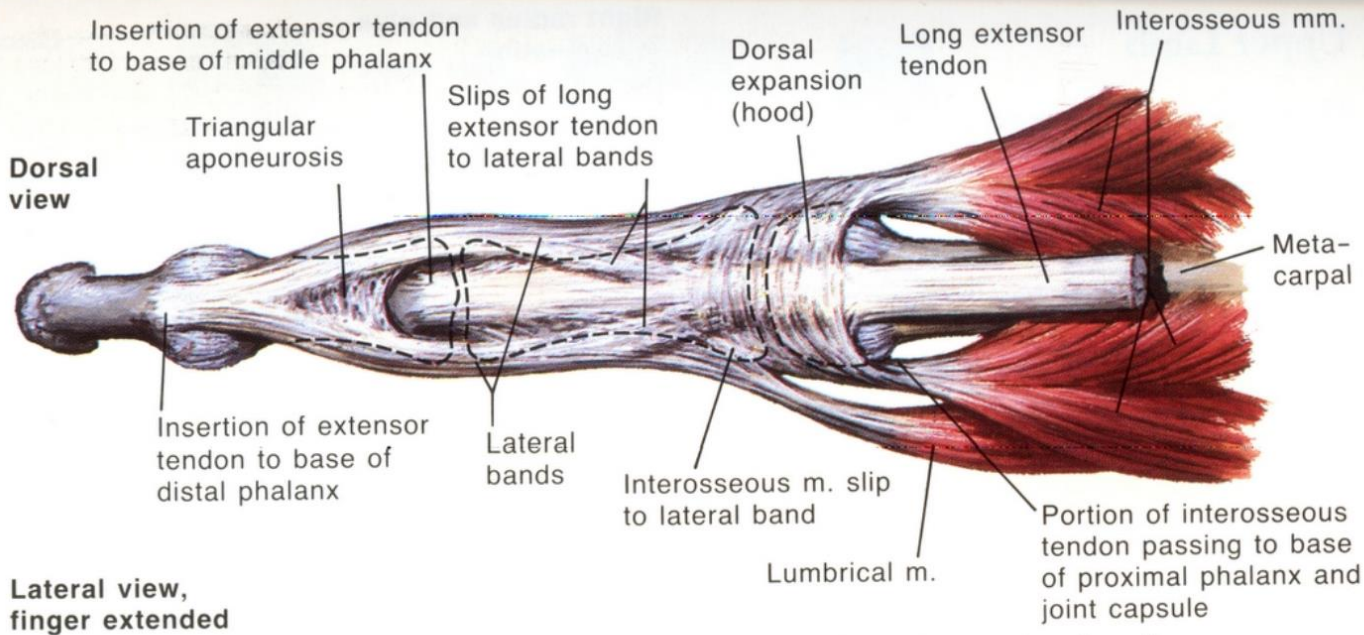
Series

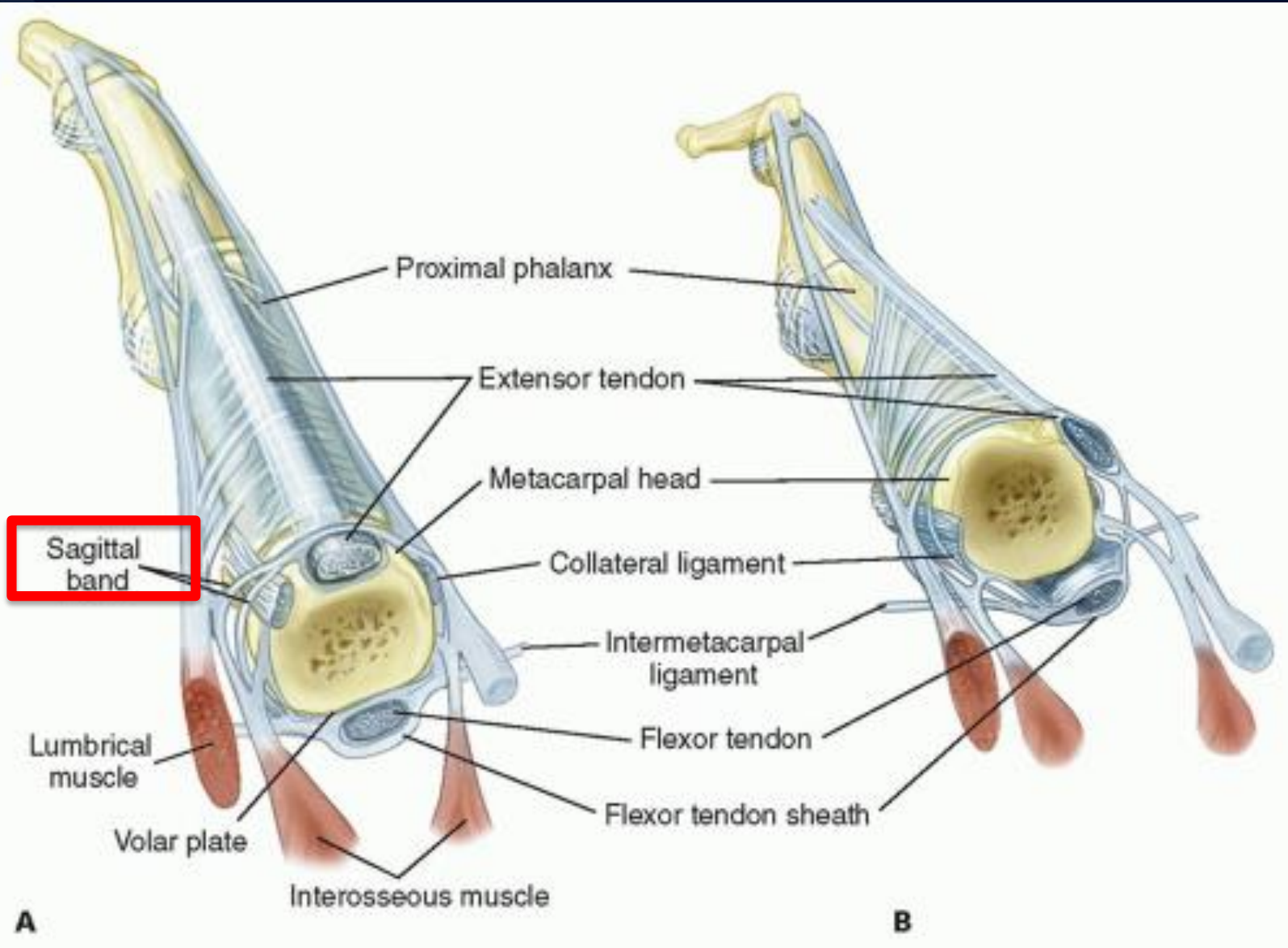


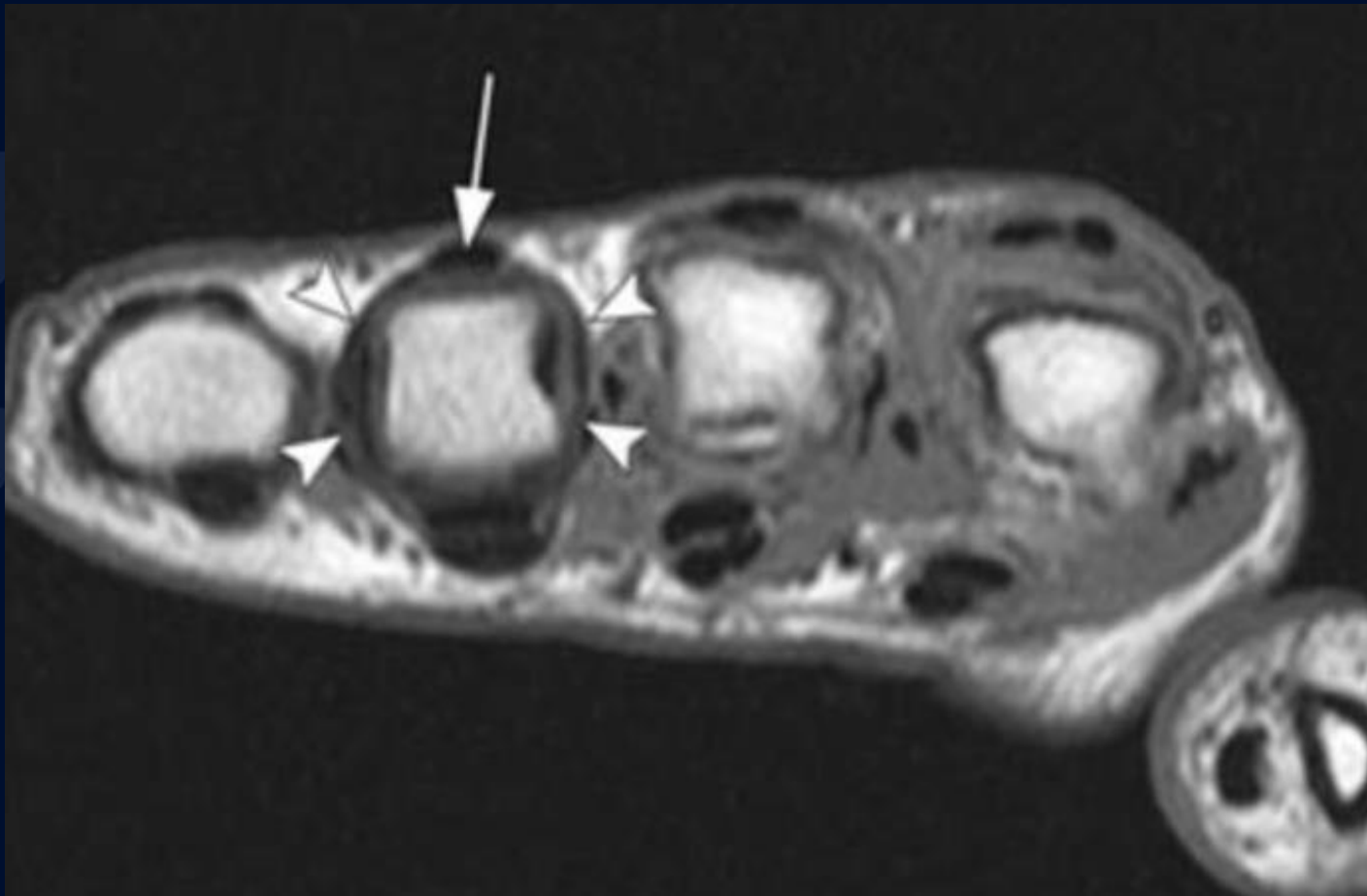
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. It features detailed vein patterns and a lobed edge.

?

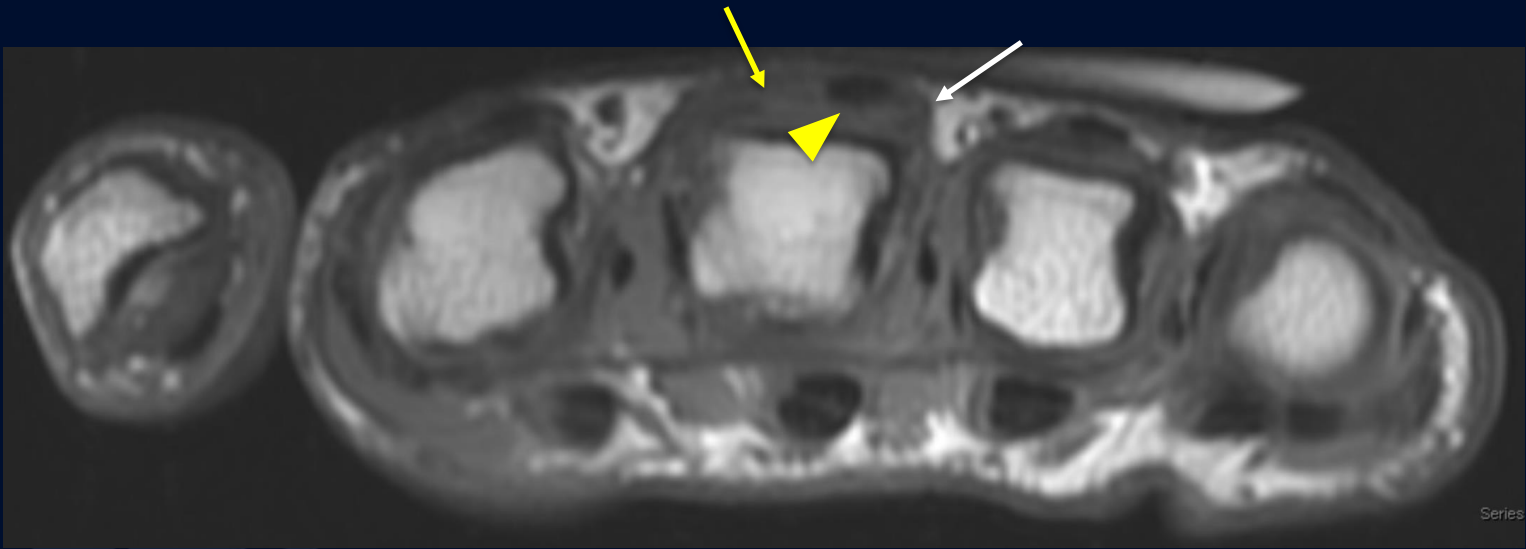
# Boxer's knuckle (3<sup>rd</sup> digit)



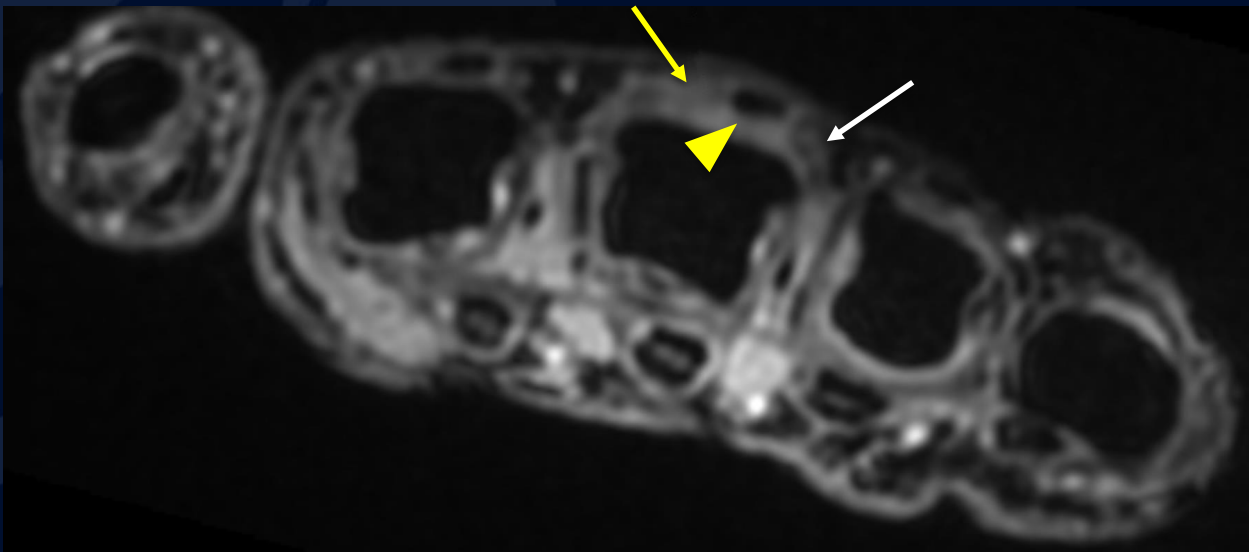




- Axial T1 MRI of the hand through the ring finger MCP. Central extensor tendon (arrow) is maintained in the midline by opposing actions of the radial and ulnar sagittal bands (arrowheads). Deep to the sagittal bands are the collateral ligaments.



Axial T1 and PD FS images through the 3<sup>rd</sup> digit MCP joint demonstrate focal thickening along the ulnar aspect of the sagittal band (white arrow) with absence of the radial sagittal band (yellow arrow) and ulnar subluxation of the extensor tendon (yellow arrowhead).





# Boxer knuckle

- Extensor hood sagittal band tear at the MCP joint with subluxation/dislocation of the common extensor tendon
- Commonly results from direct blow while MCP joint flexed and finger ulnarly deviated
  - Can also be atraumatic in the setting of rheumatoid arthritis
- 3<sup>rd</sup> digit with medial tendon subluxation (lateral band disruption) most common pattern of injury
- Ultrasound and MRI both useful in diagnosis
- Potentially career-ending injury if not identified and treated
  - Tx includes immobilization and surgery if conservative measures fail

# References

1. <https://www.orthobullets.com/hand/6029/sagittal-band-rupture-traumatic-extensor-tendon-dislocation>
2. <https://www.ajronline.org/doi/full/10.2214/AJR.14.12776>
3. <http://radsource.us/extensor-tendon-injuries-of-the-finger/>
4. Statdx