

# CASE 3

- 27y/male
- Recreational soccer player
- Visited the ortho clinic on 17.9.2015 with c/o pain and swelling over the 1<sup>st</sup> MTPJ
- Sustained injury 8/52 ago

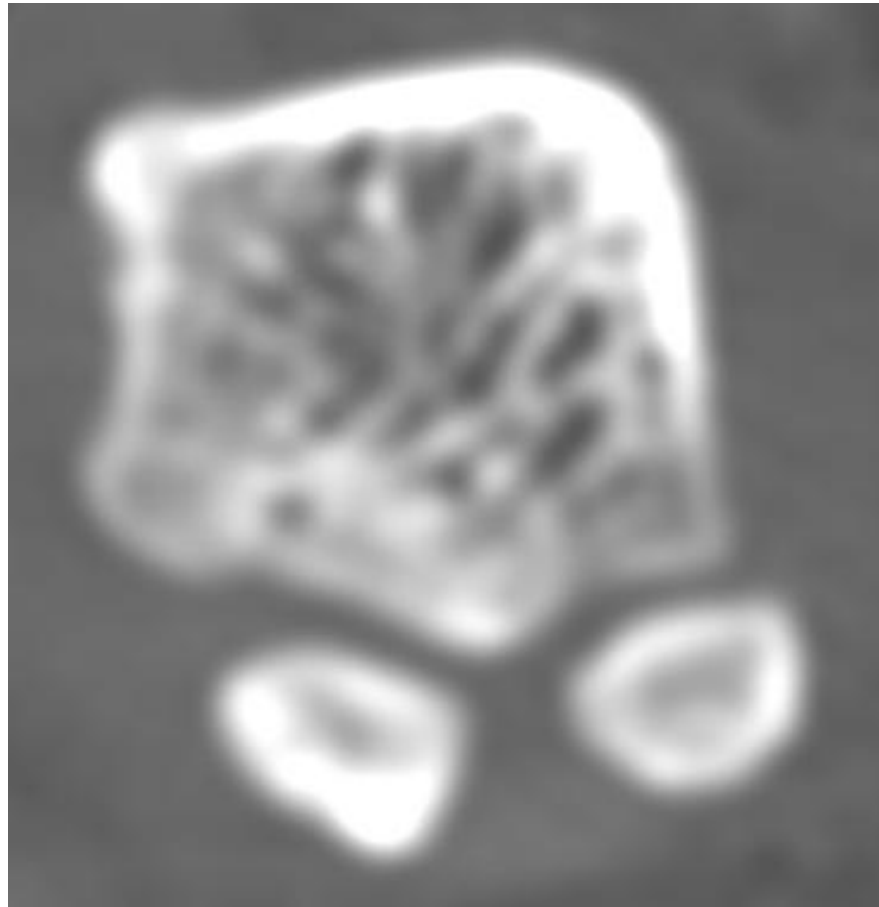
# XR FOOT (L) & (R) AP



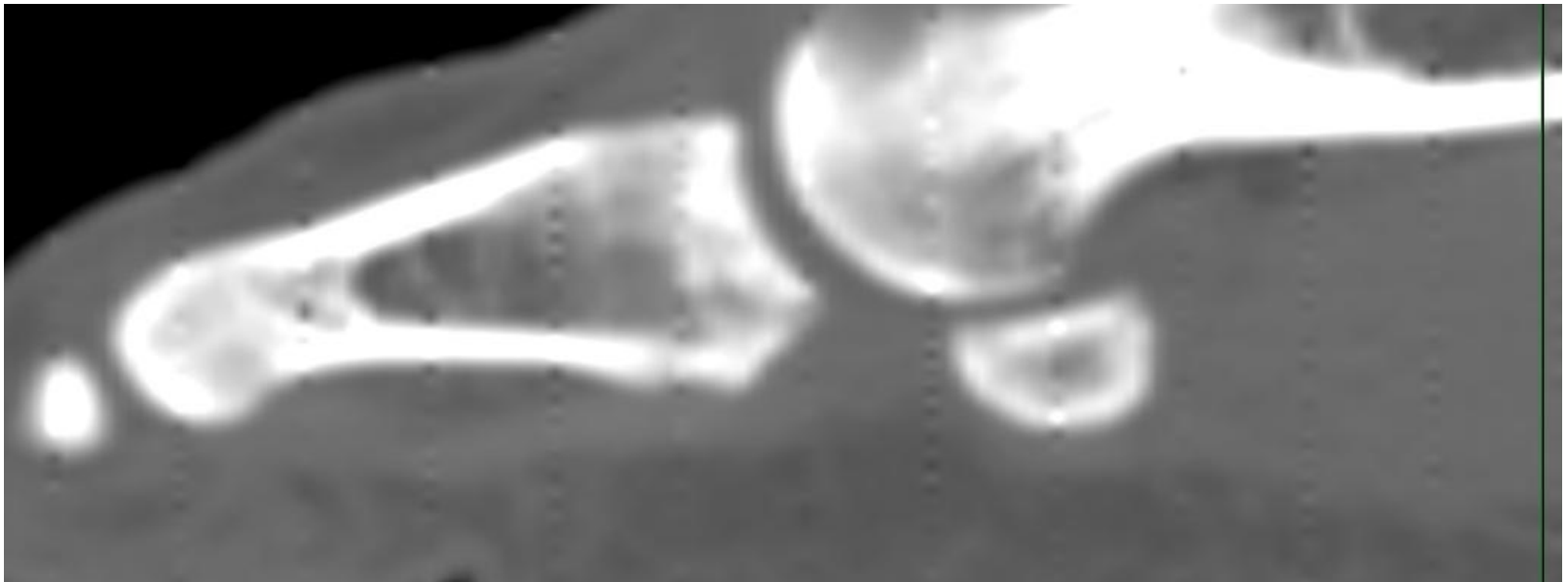
# XR FOOT (L) & (R) OBLIQUE



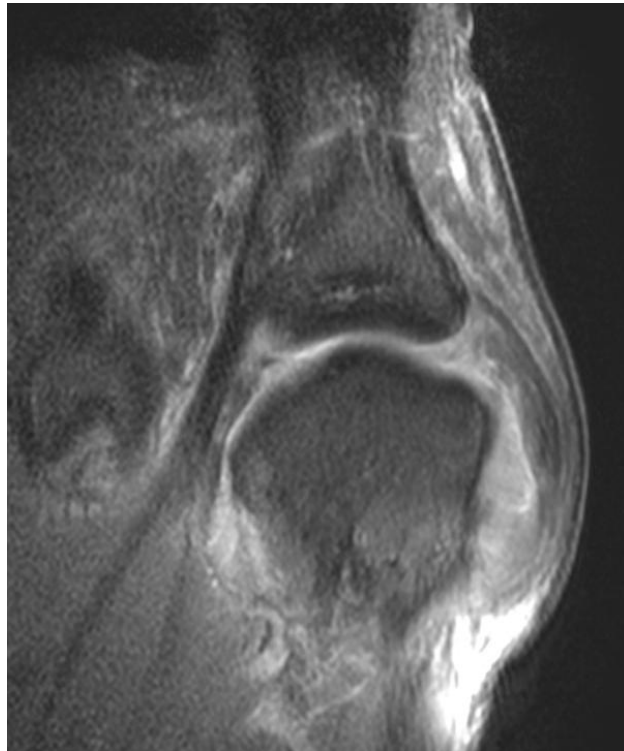
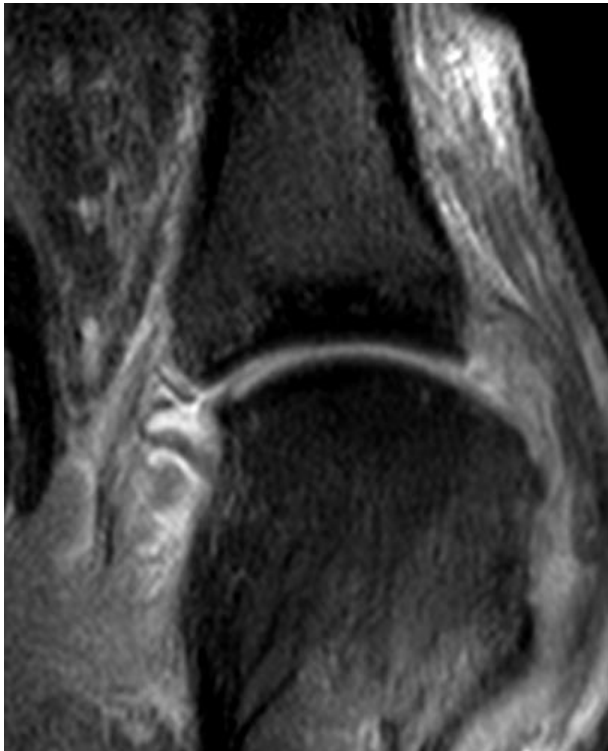
CT



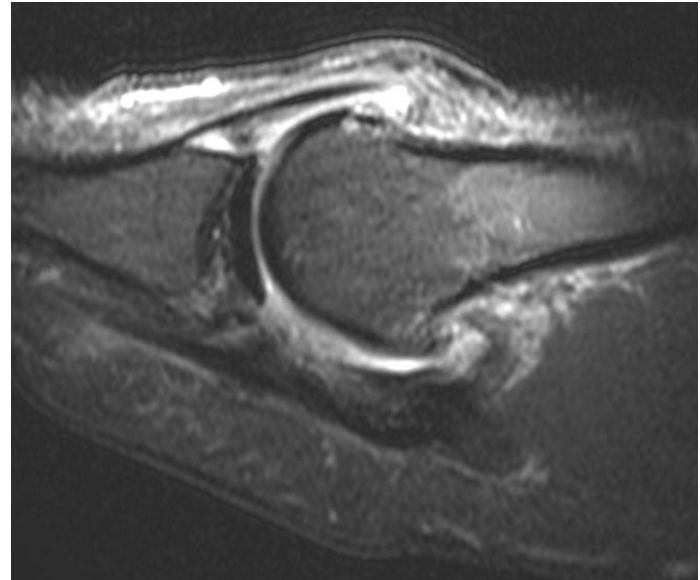
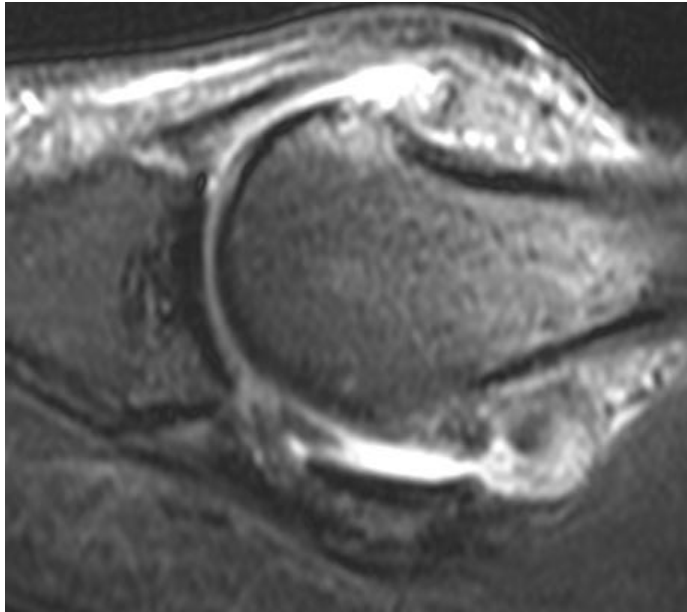
# CT SAG



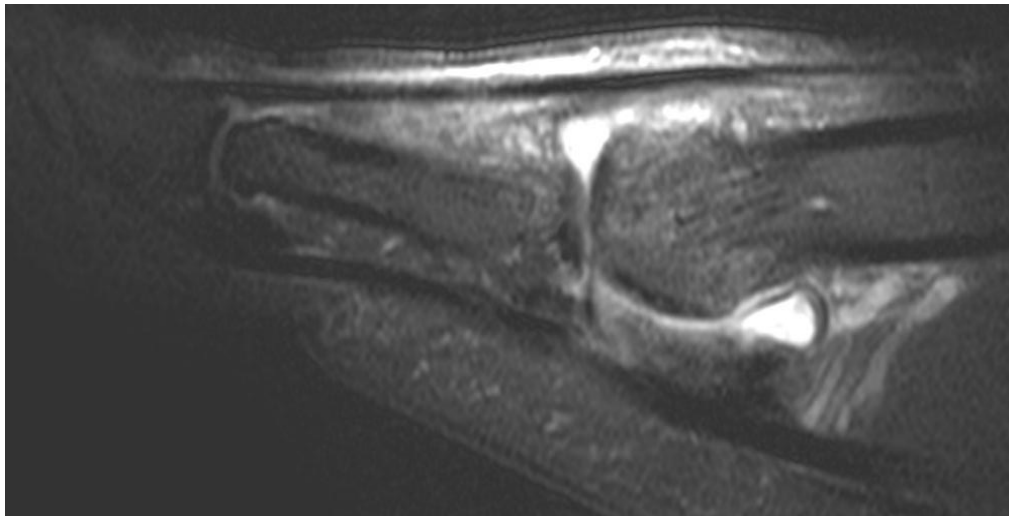
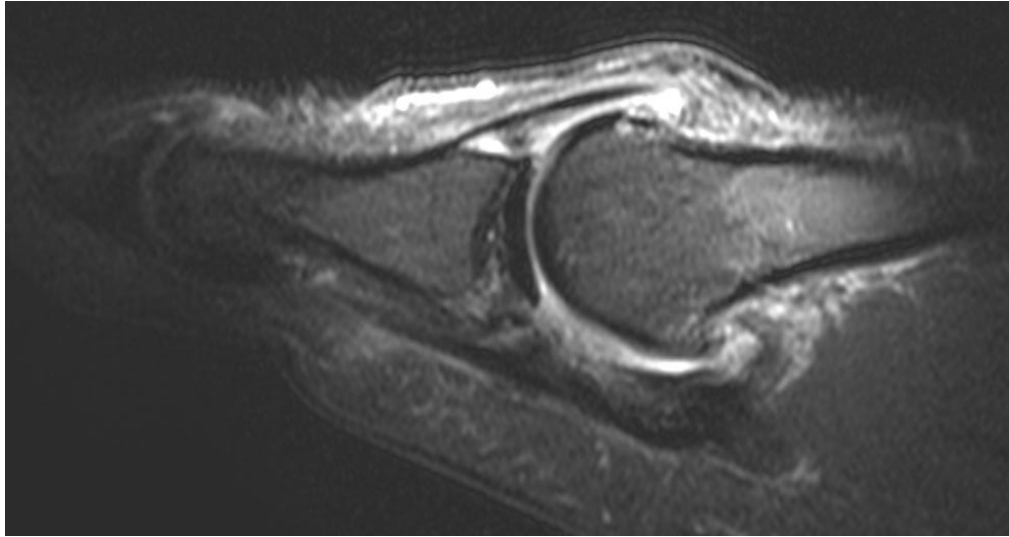
PD FS COR



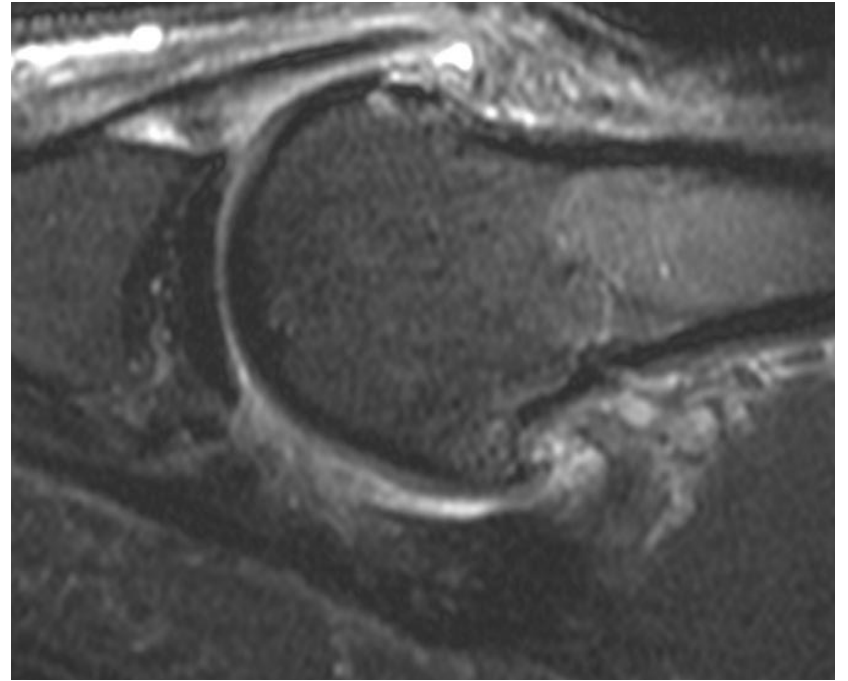
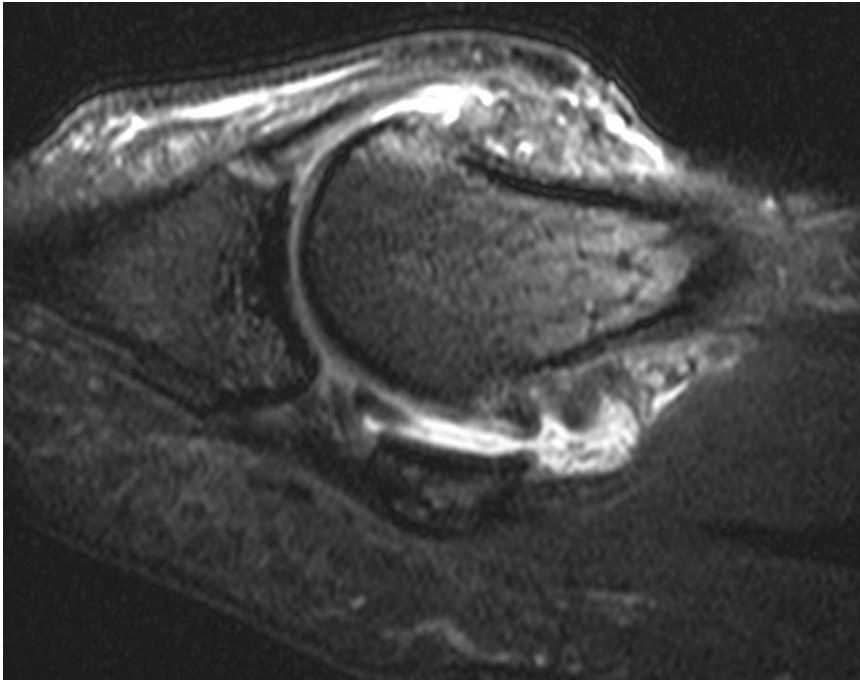
PD FS SAG



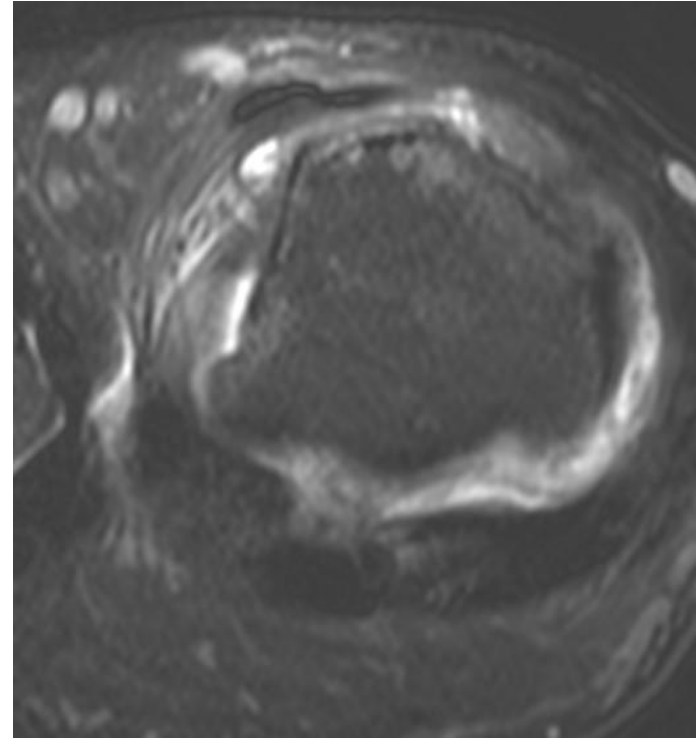
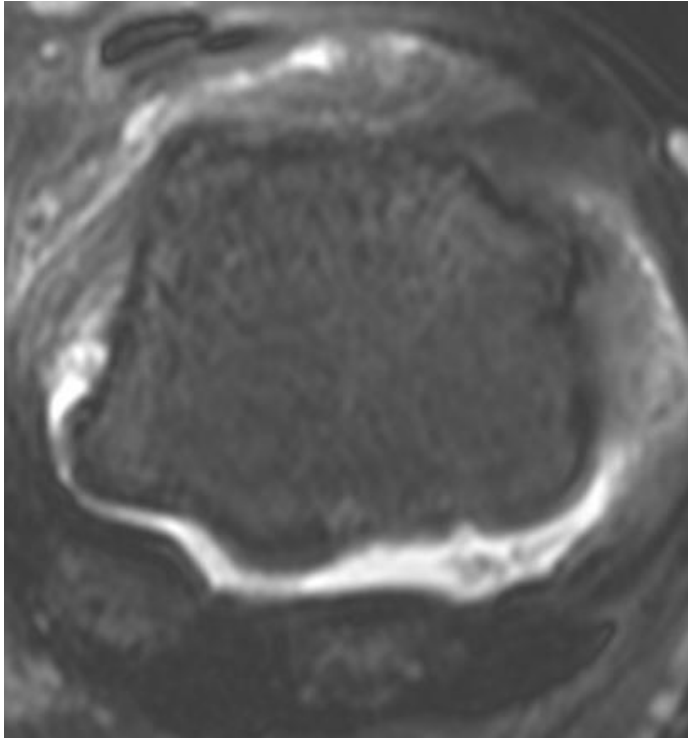
PD FS SAG



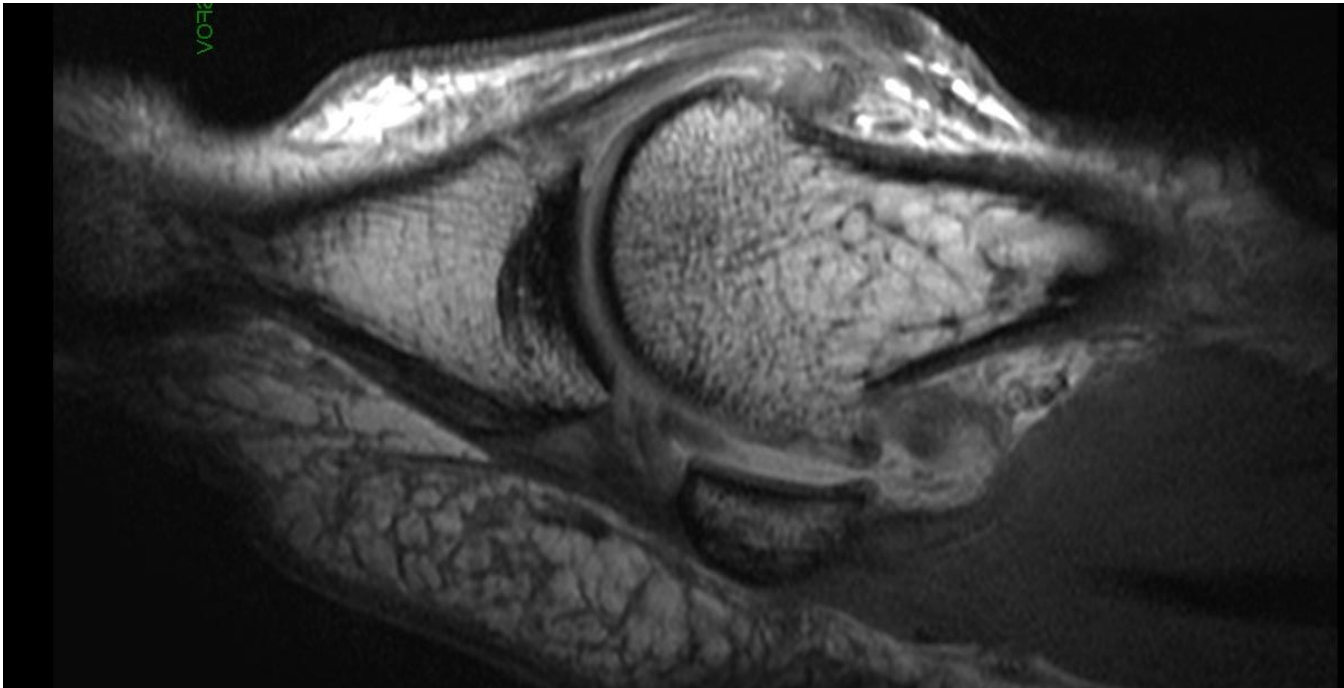
# T2 FS SAG



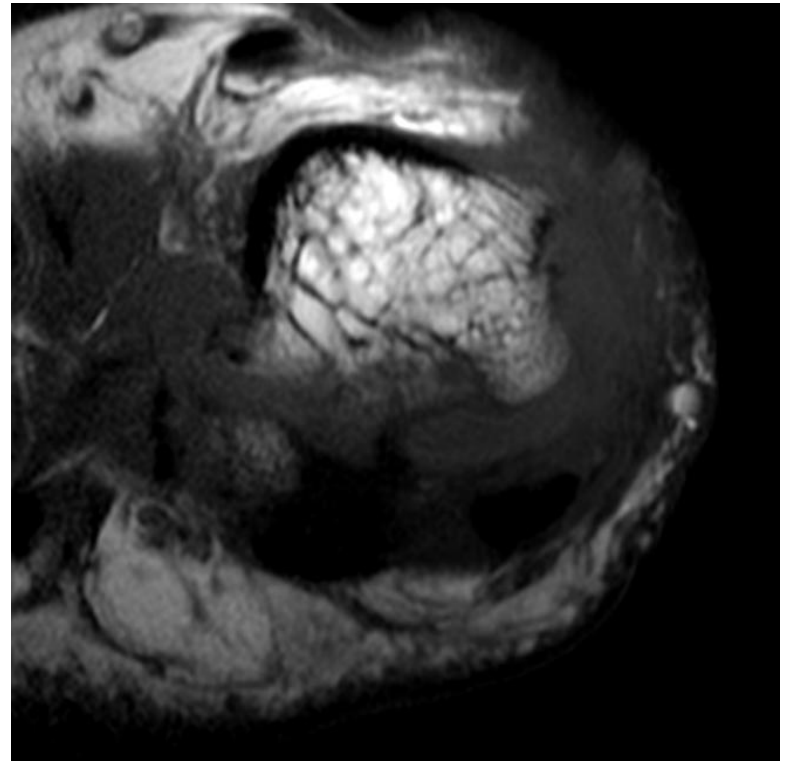
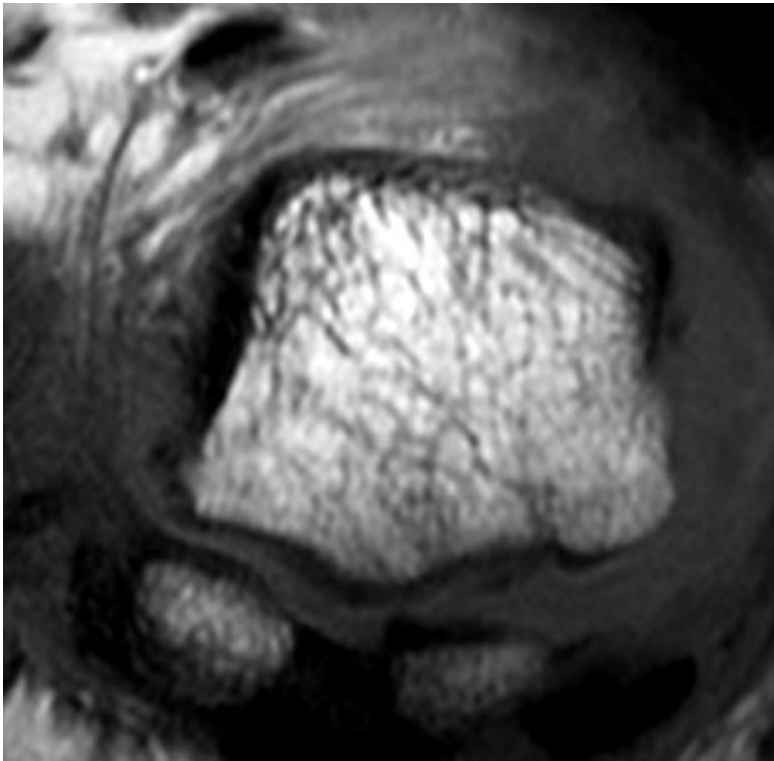
# T2 FS AX



# PD SAG



T1 AX



# TURF TOE

- Sprain of the plantar capsuloligamentous complex of the metatarsophalangeal (MTP) joint of the great toe.
- Valgus - hyperextension



Illustration of the mechanism of a turf toe injury. Axial loading forces are applied to the MTP joint while in the equinovarus position.

# ANATOMY

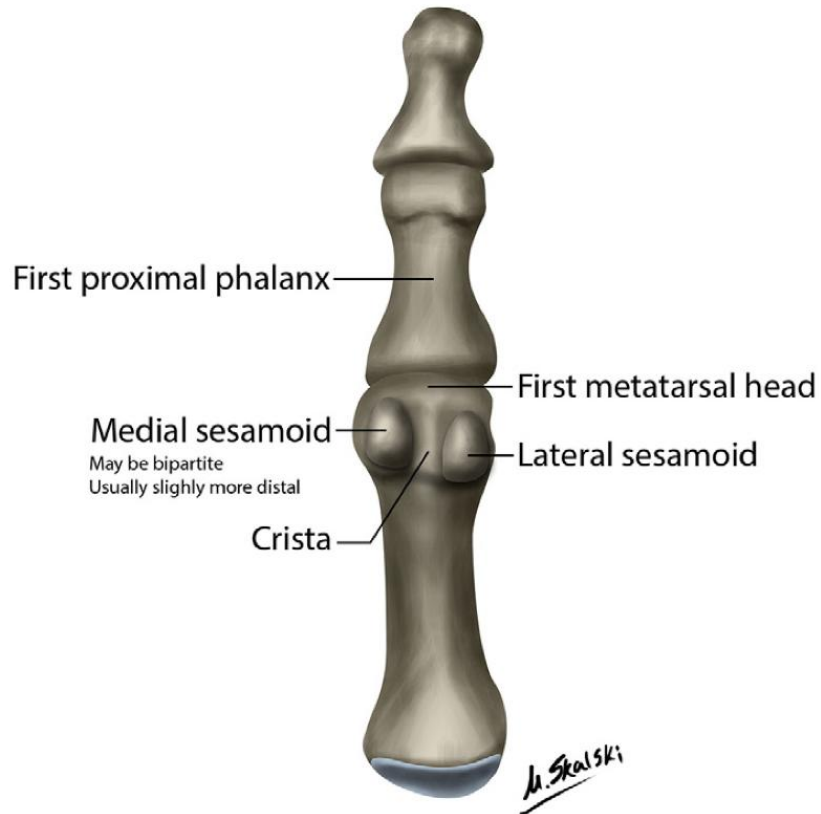
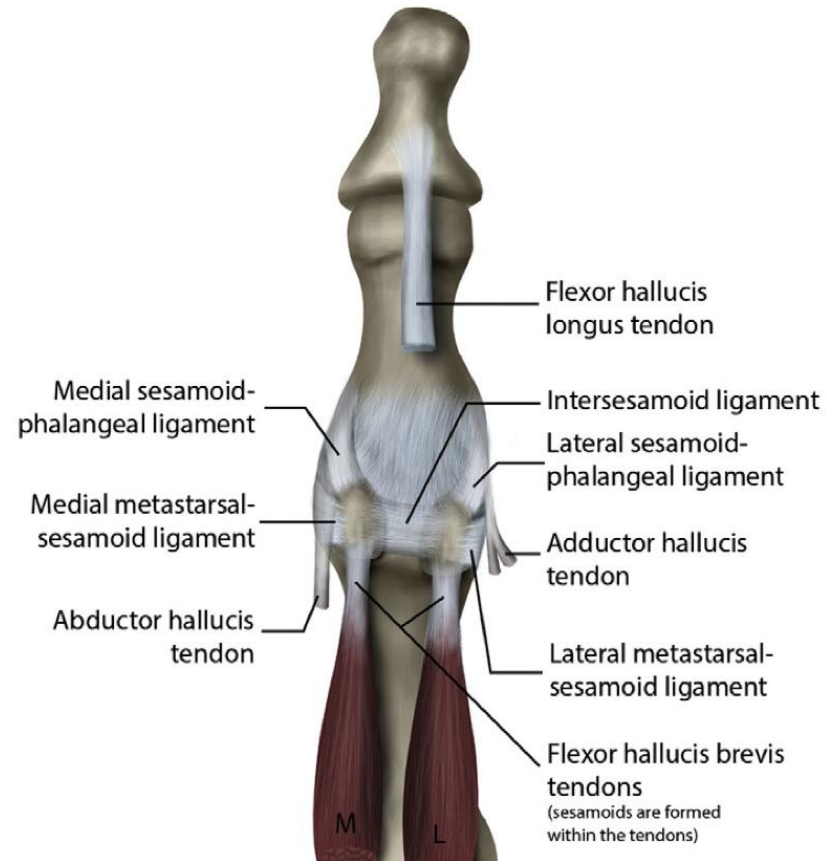
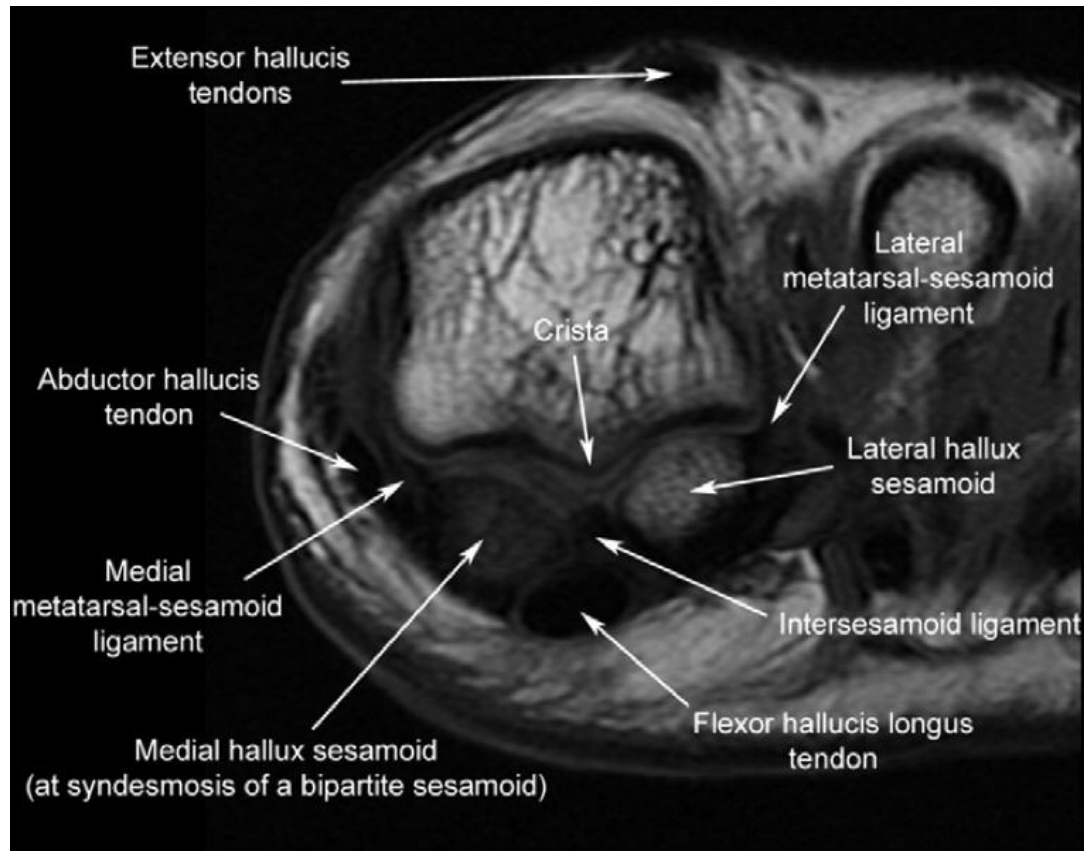


Fig. 1 Normal bony anatomy of the First MTP joint

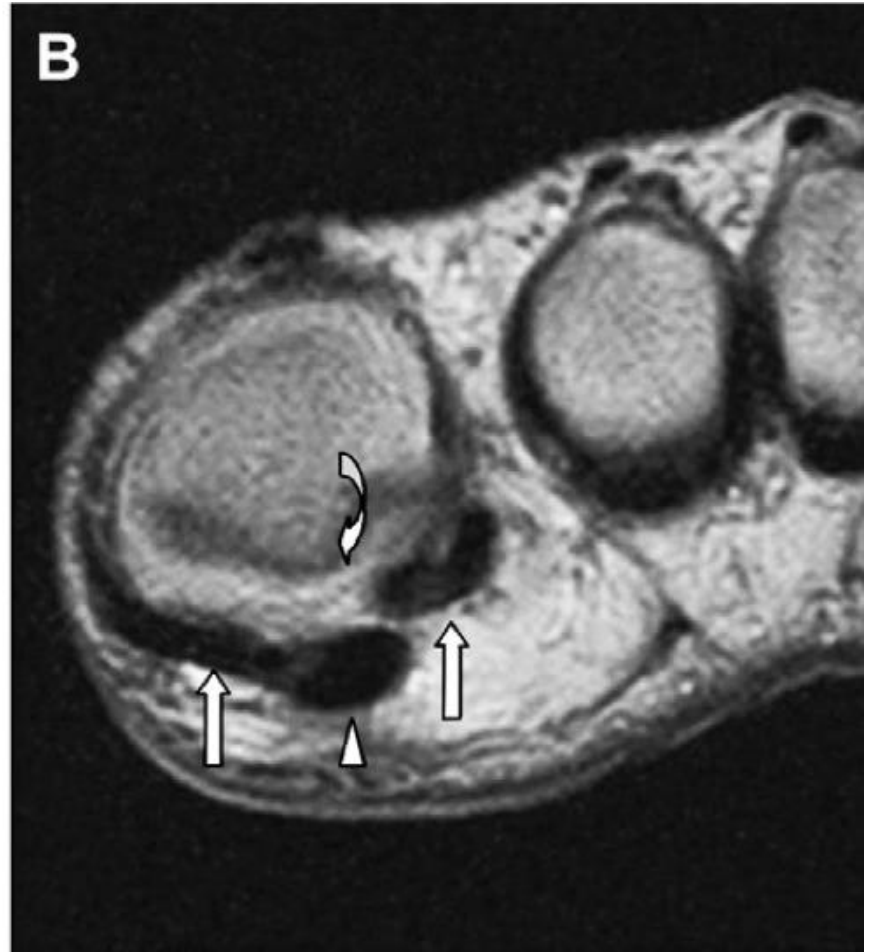
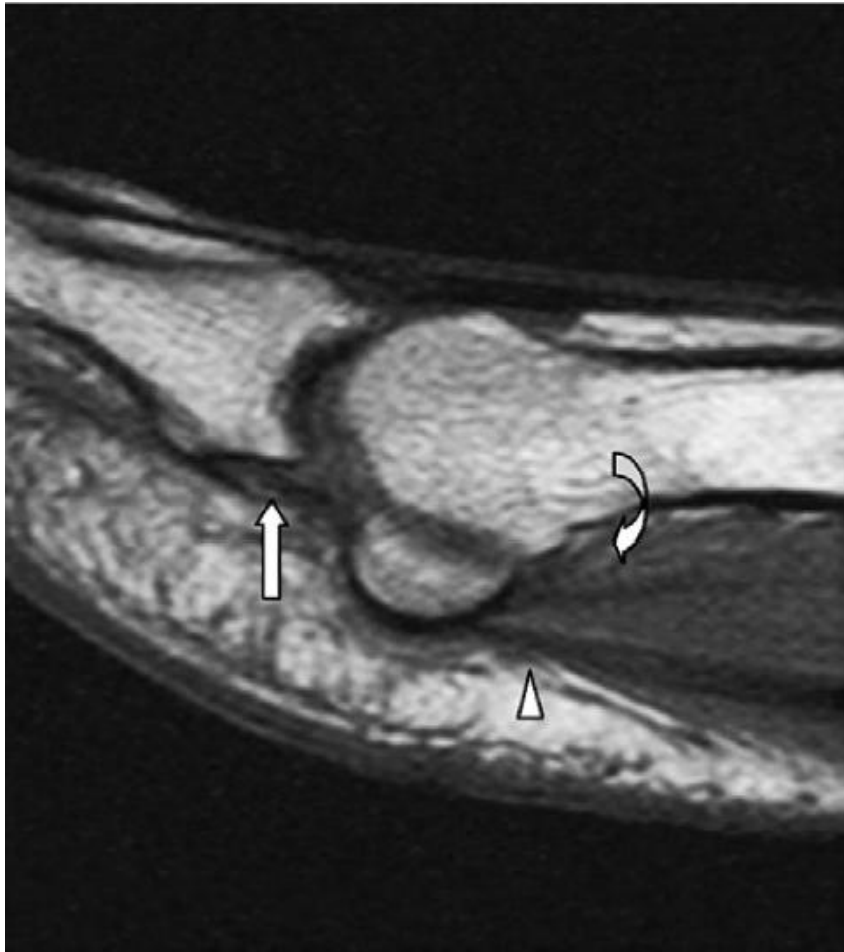


# MRI ANATOMY

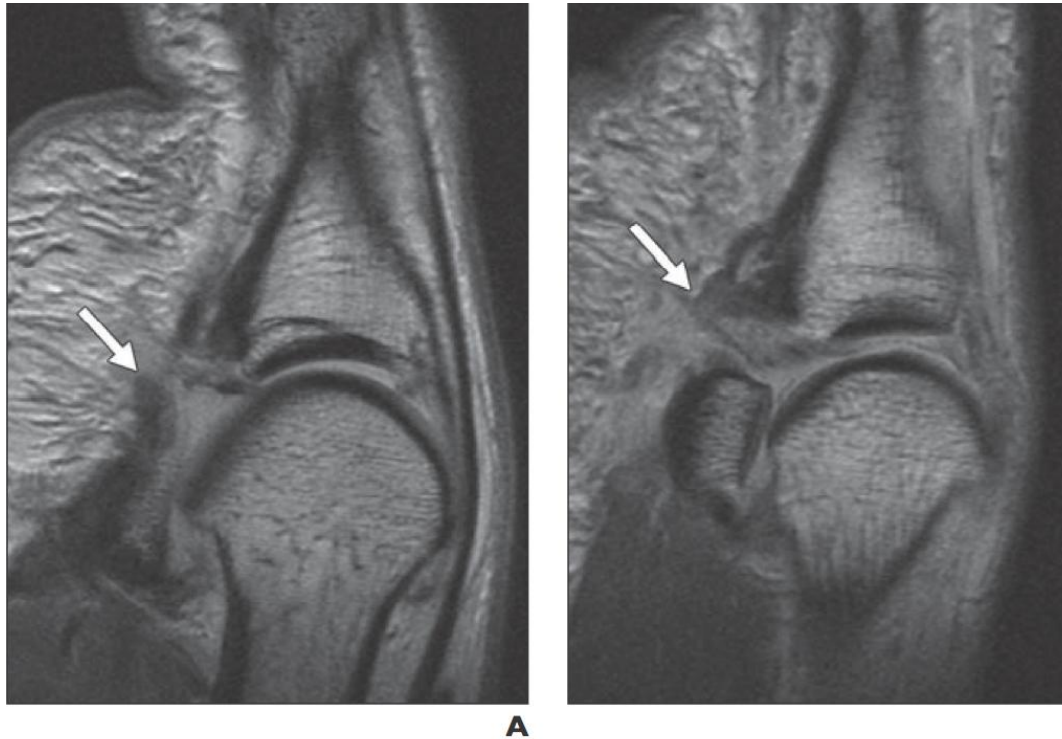


**fig. 4.** Short-axis T1W image through the first metatarsal head, showing normal anatomy.

# MRI ANATOMY



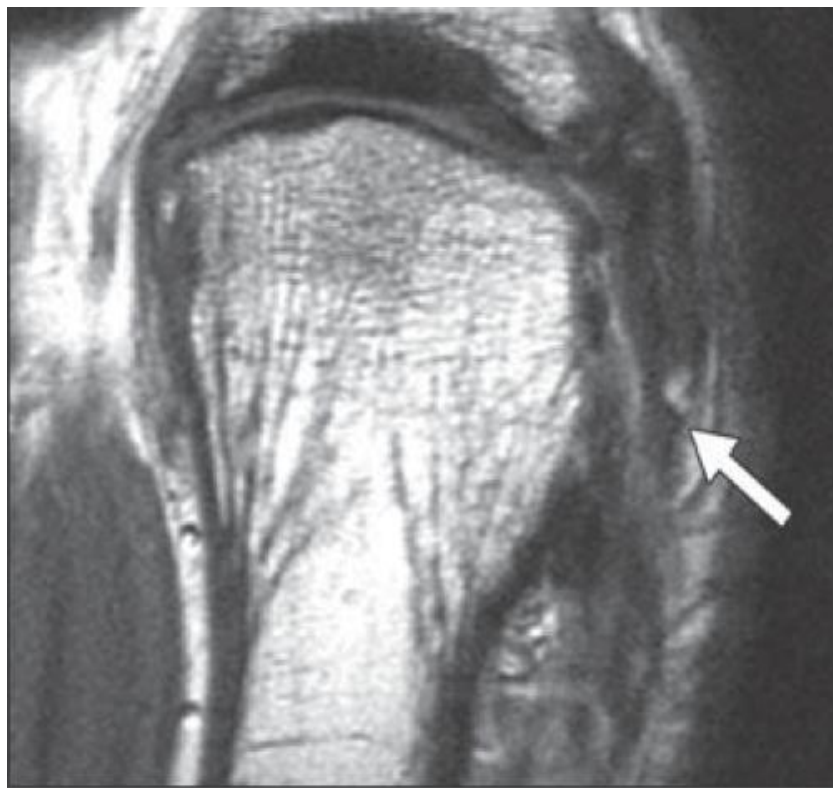
# TURF TOE



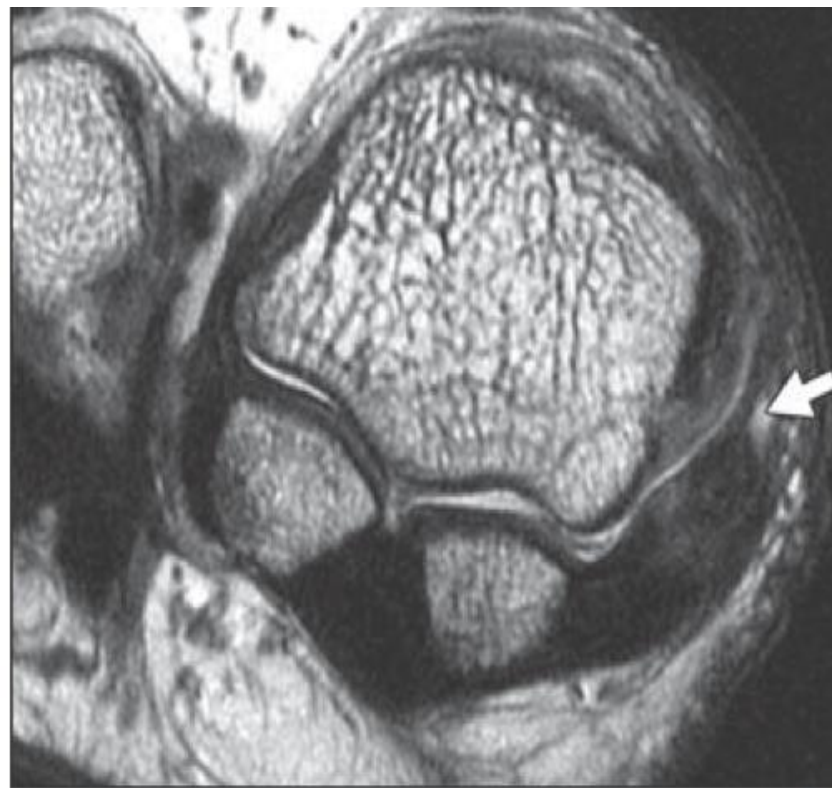
**Fig. 1**—24-year-old male professional cricketer who presented with right hallux pain, swelling, and inability to weight bear on hallux following acute injury sustained while batting, pivoting on foot with resultant hyperextension mechanism.

**A**, Sagittal proton-density image shows distal avulsion (*arrow*) of lateral plantar plate (sesamophalangeal ligament), with retracted proximal stump.

**B**, Sagittal proton-density MRI shows proximal avulsion (*arrow*) of medial plantar plate (sesamophalangeal ligament), with retracted proximal stump.



**A**



**B**

**Fig. 2**—22-year-old male professional rugby league player who had hyperextension valgus injury to great toe 6 months prior.

**A**, Long-axis (axial) proton-density MRI shows nonacute complete tear (*arrow*) of medial collateral ligament at first metatarsal head insertion, with ineffective subsequent scar response.