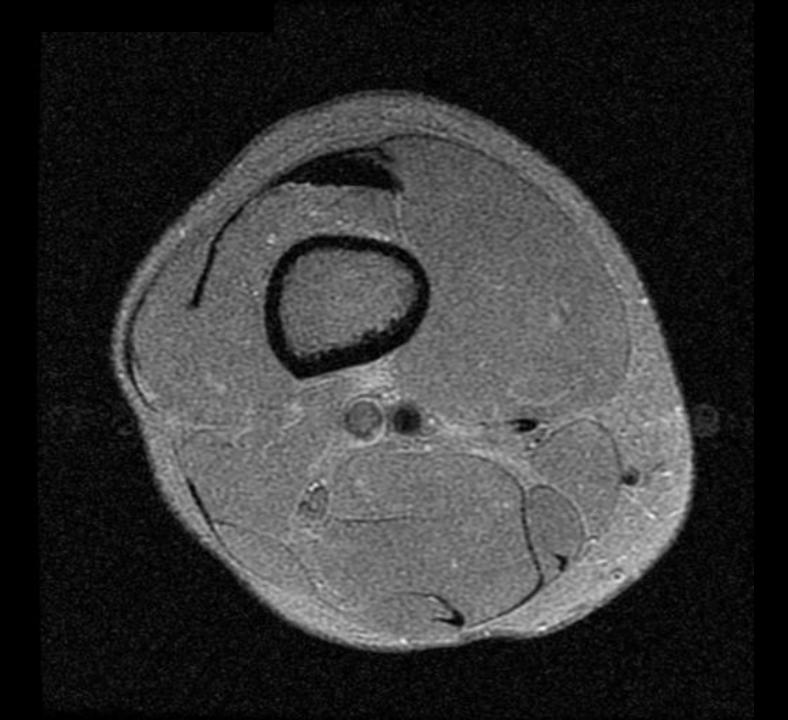
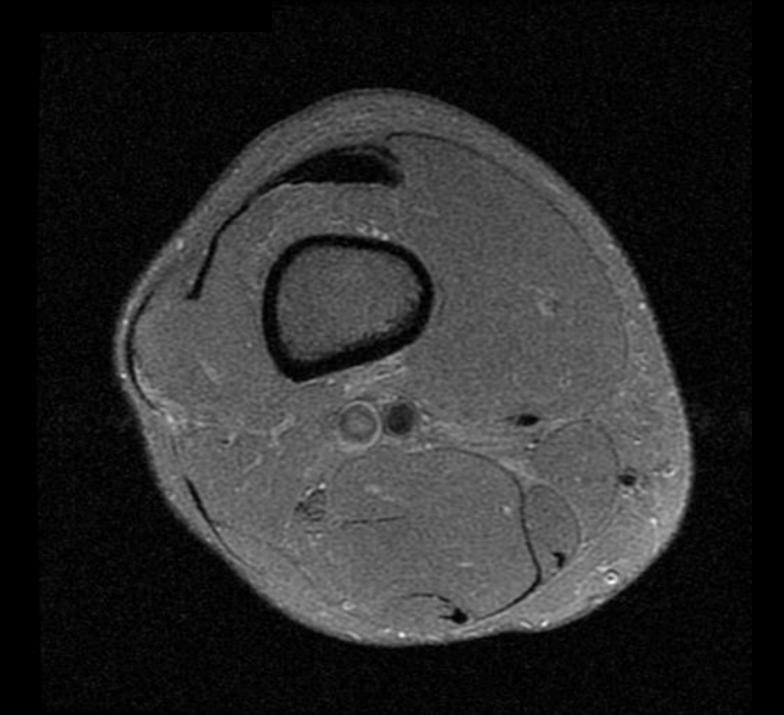
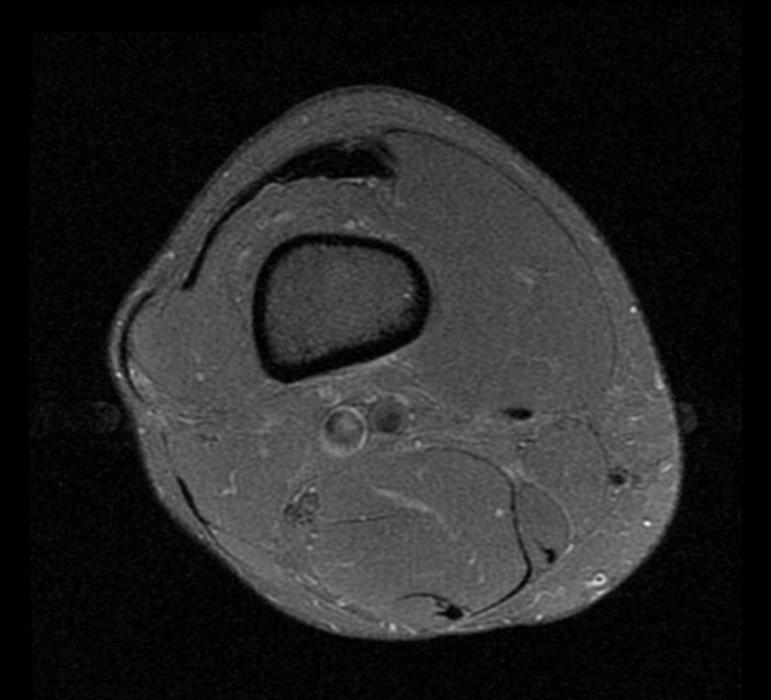
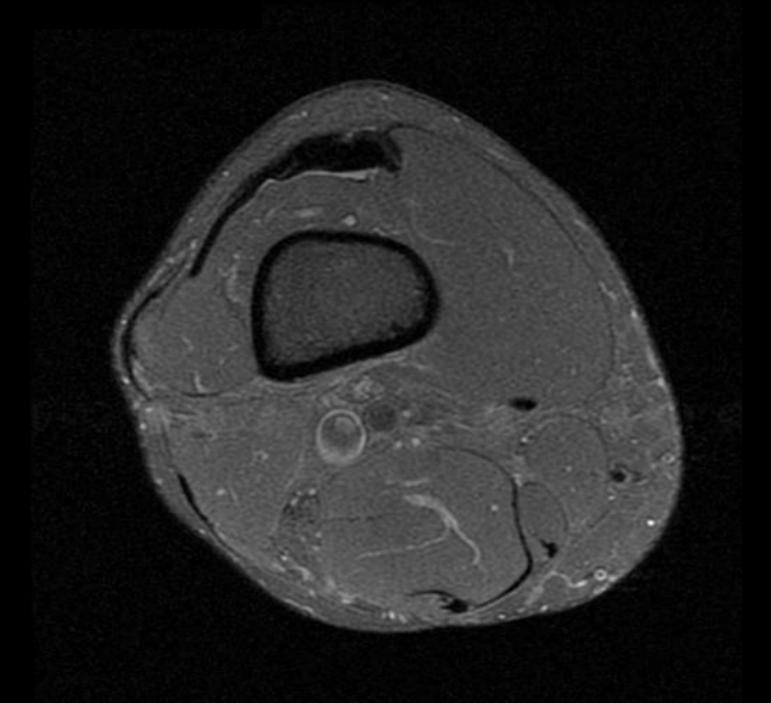
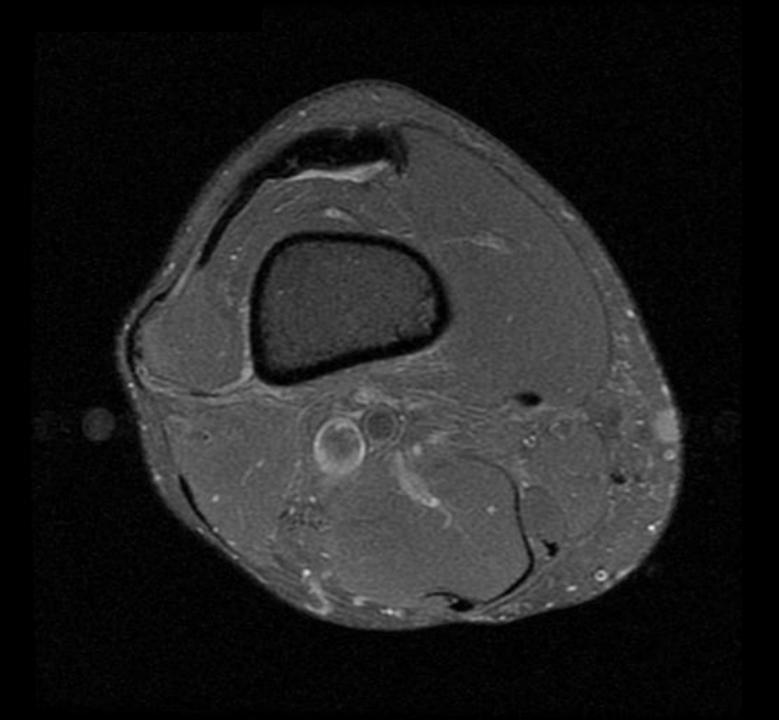
45M runner with many years of knee pain.

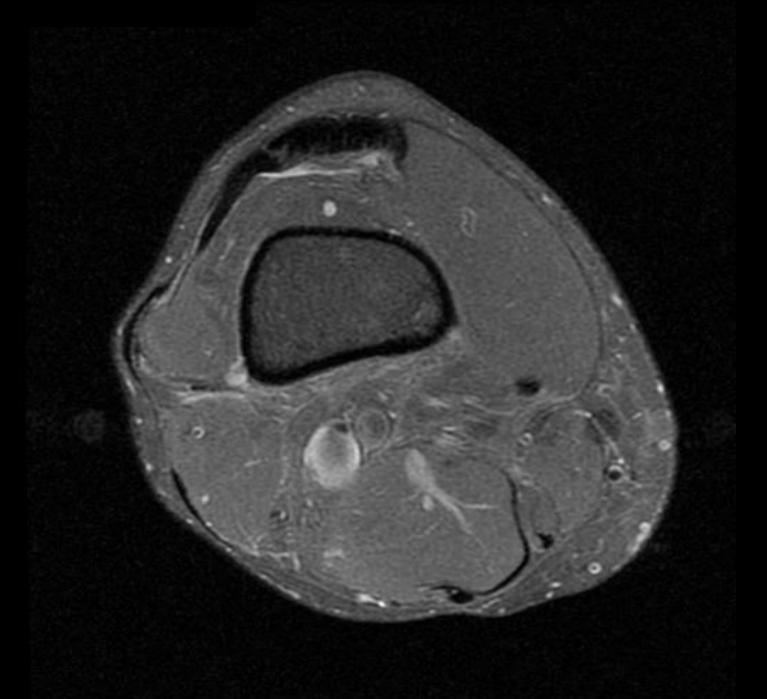


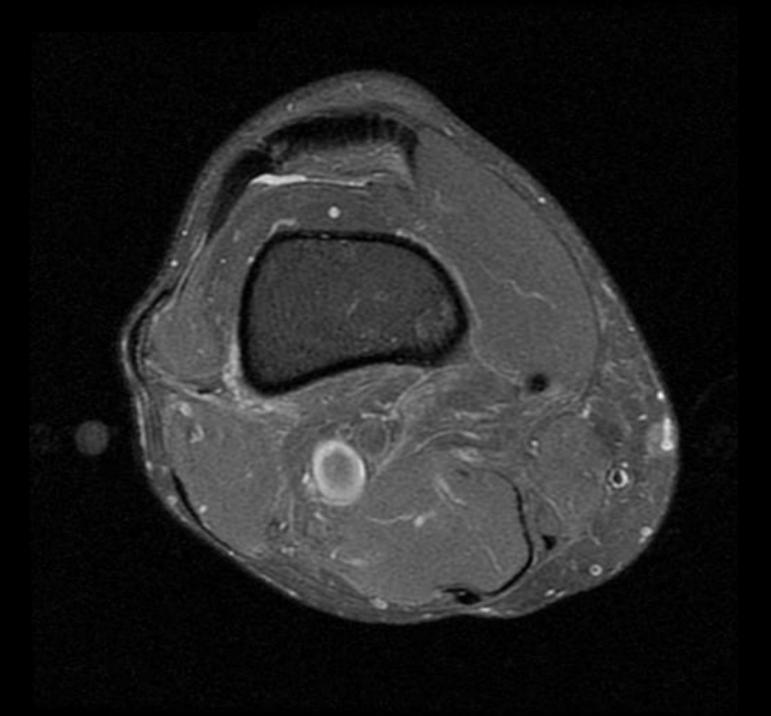


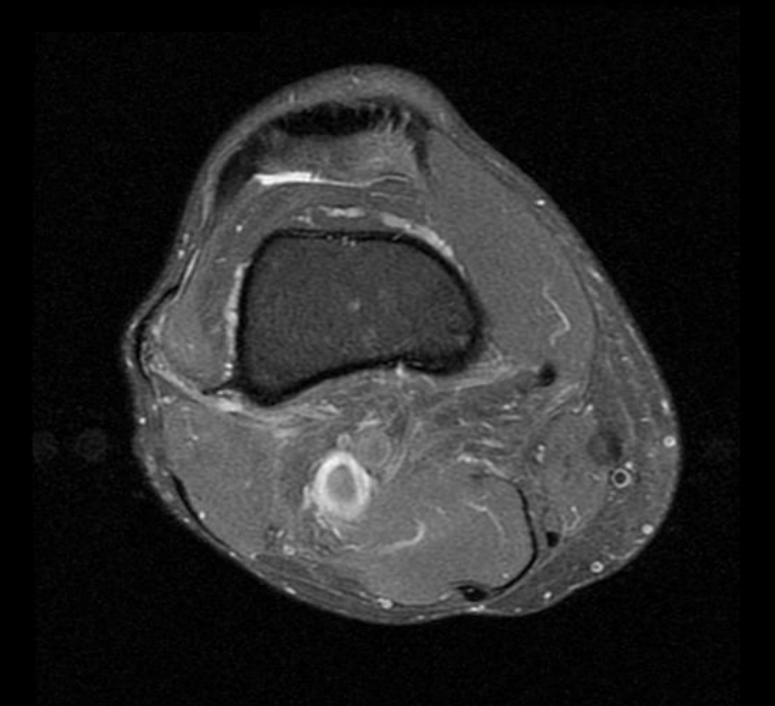


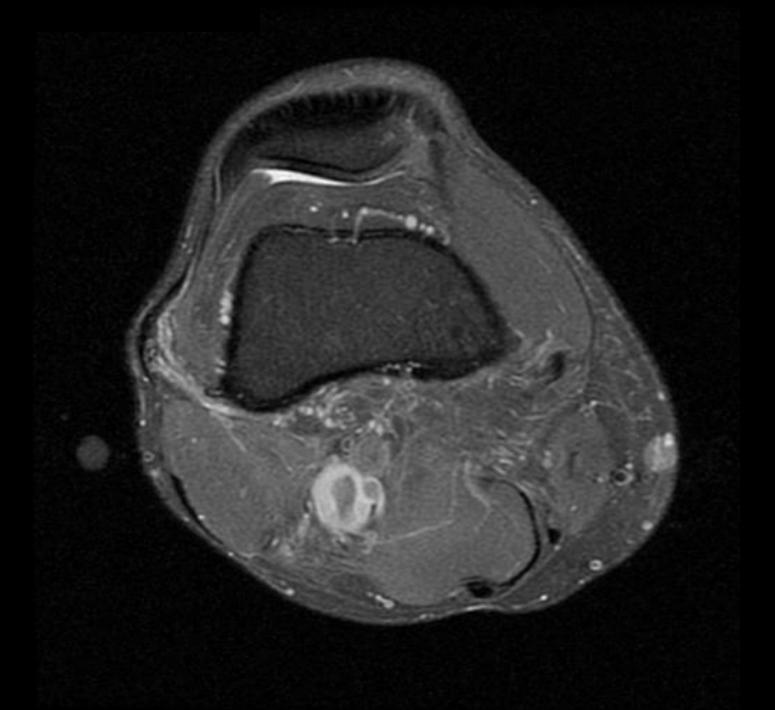


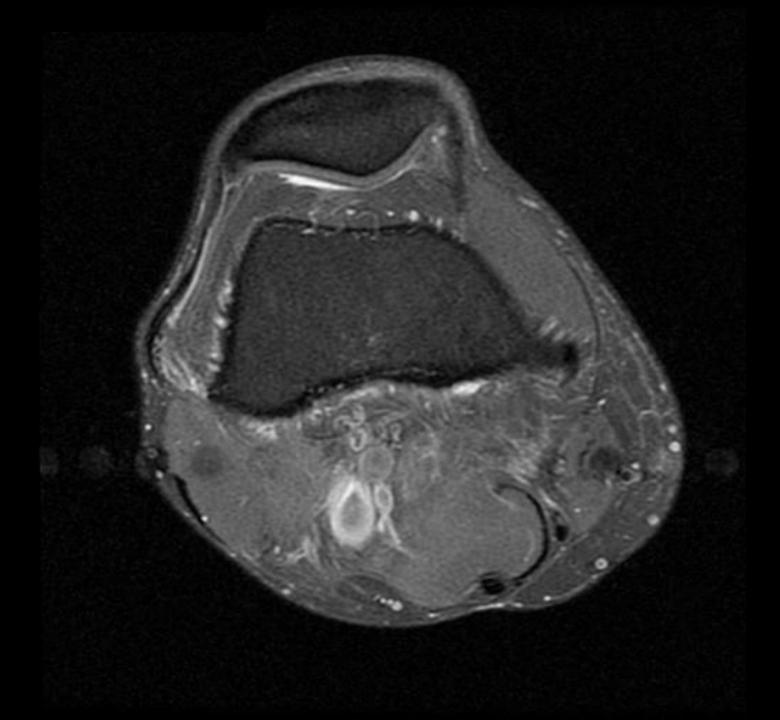


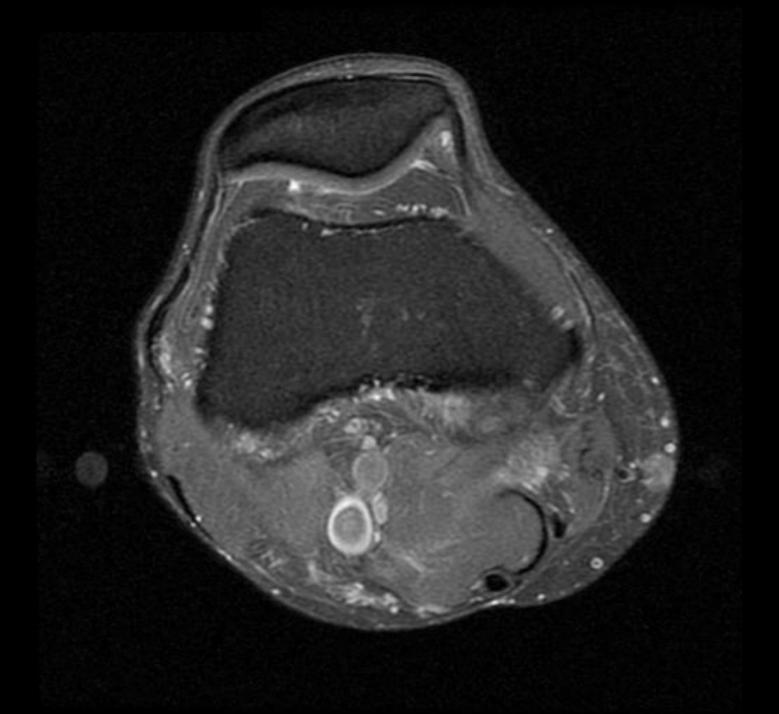


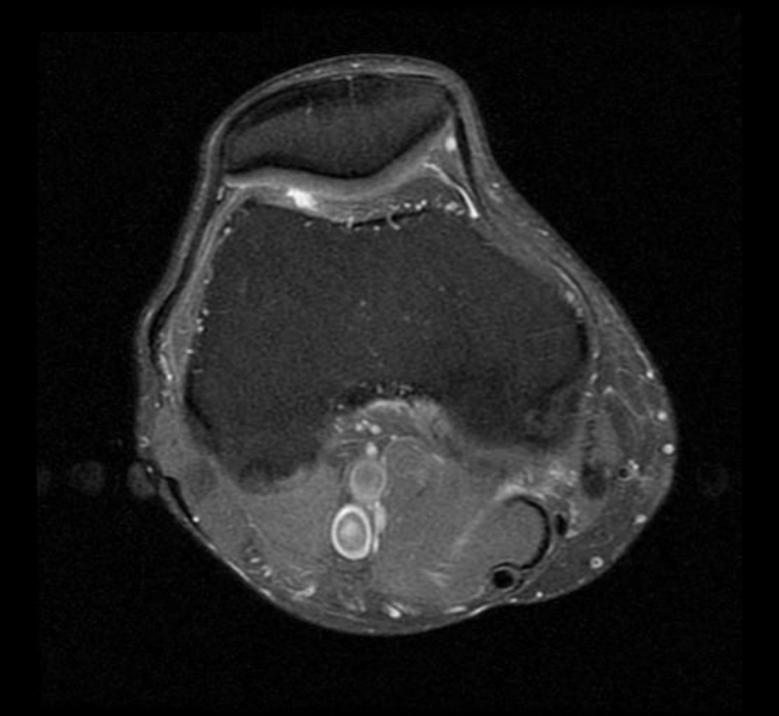


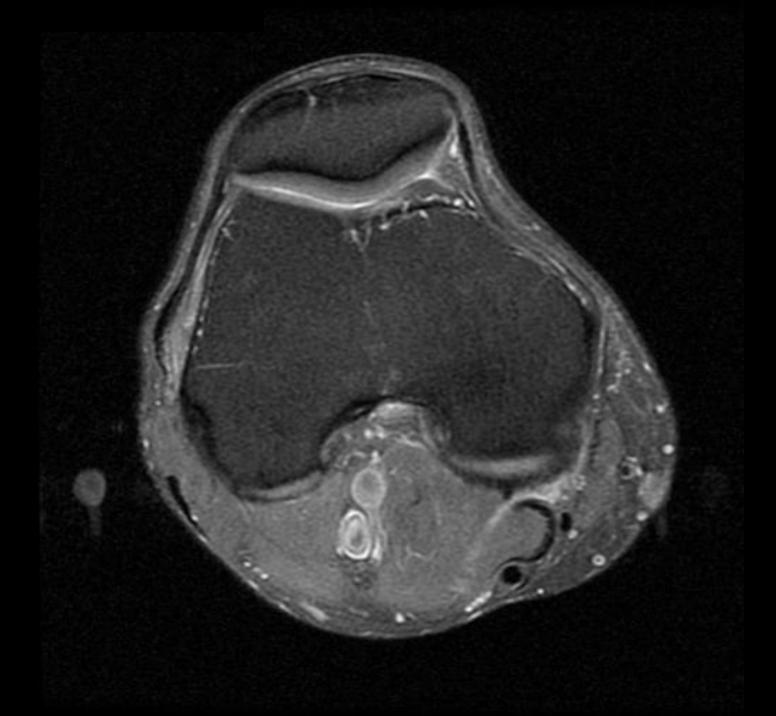




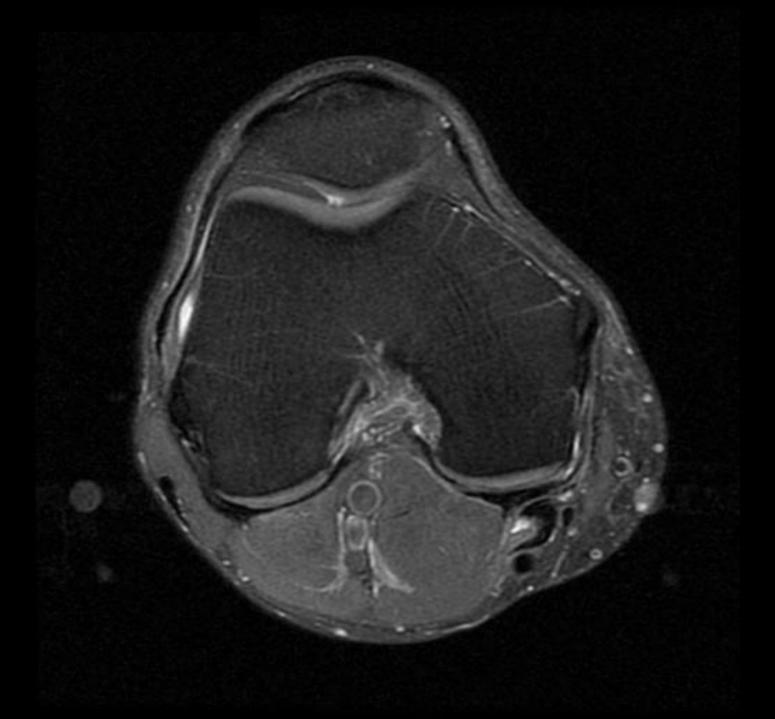


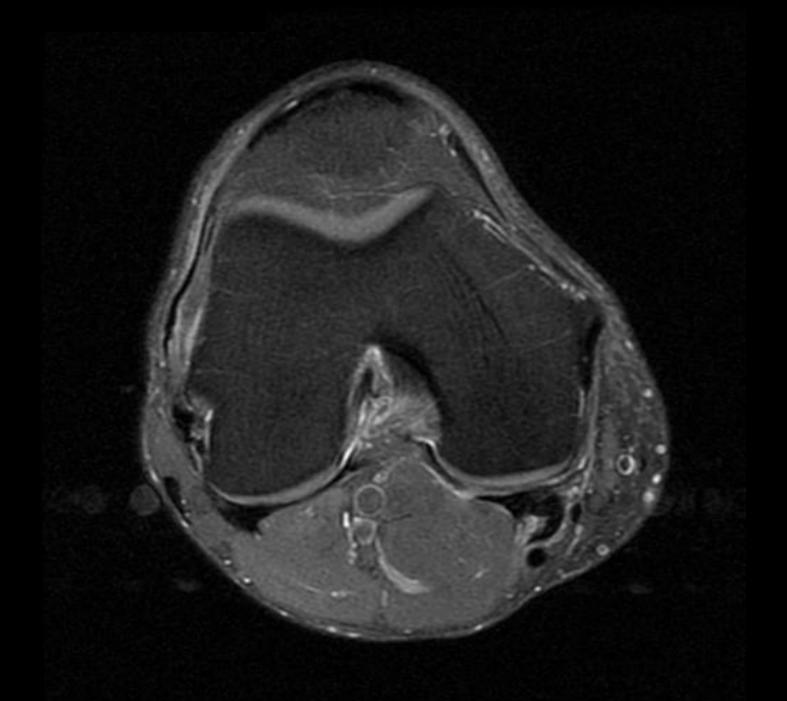


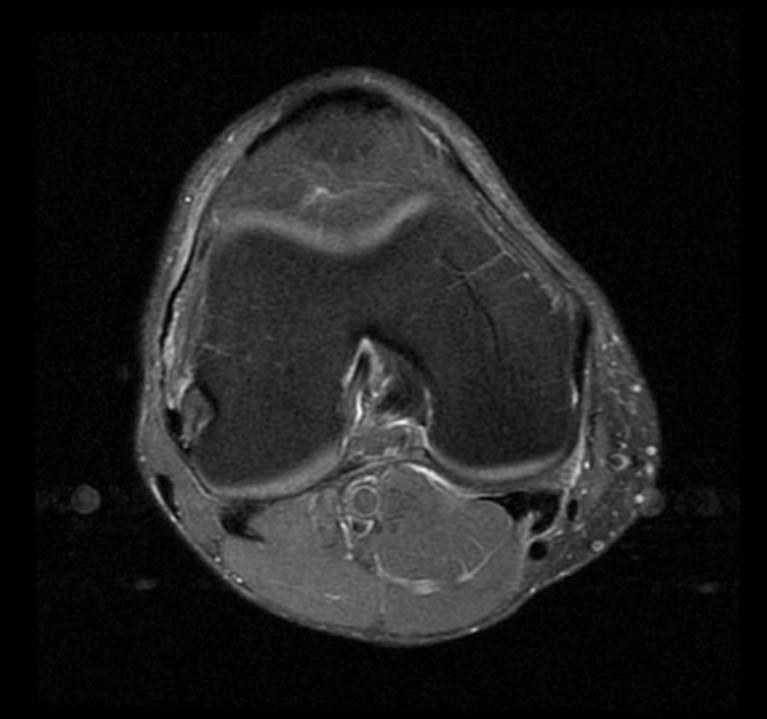


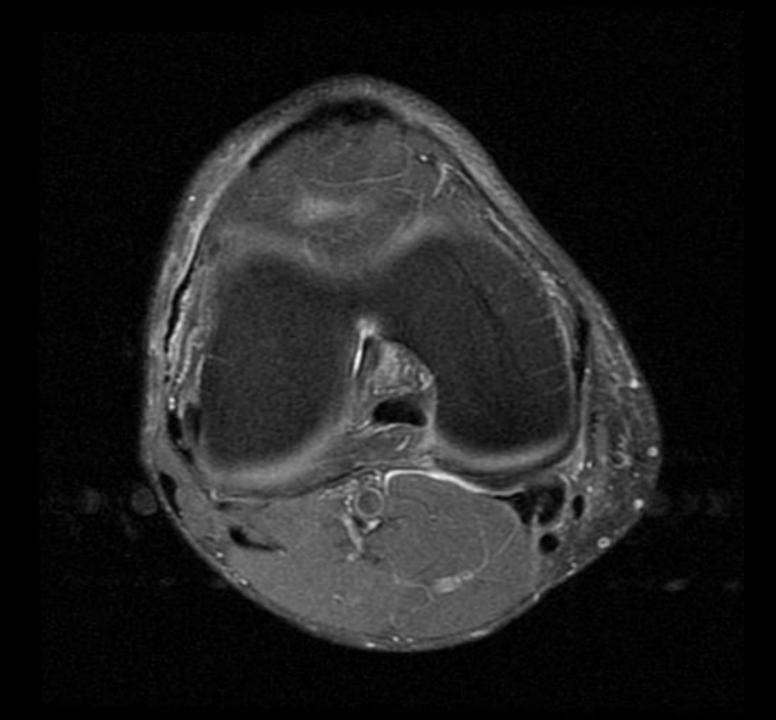


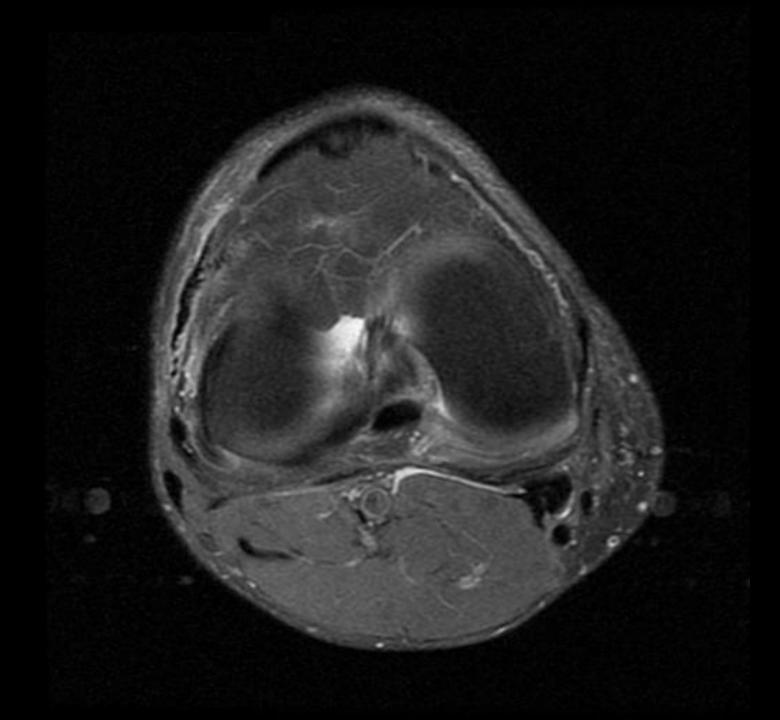


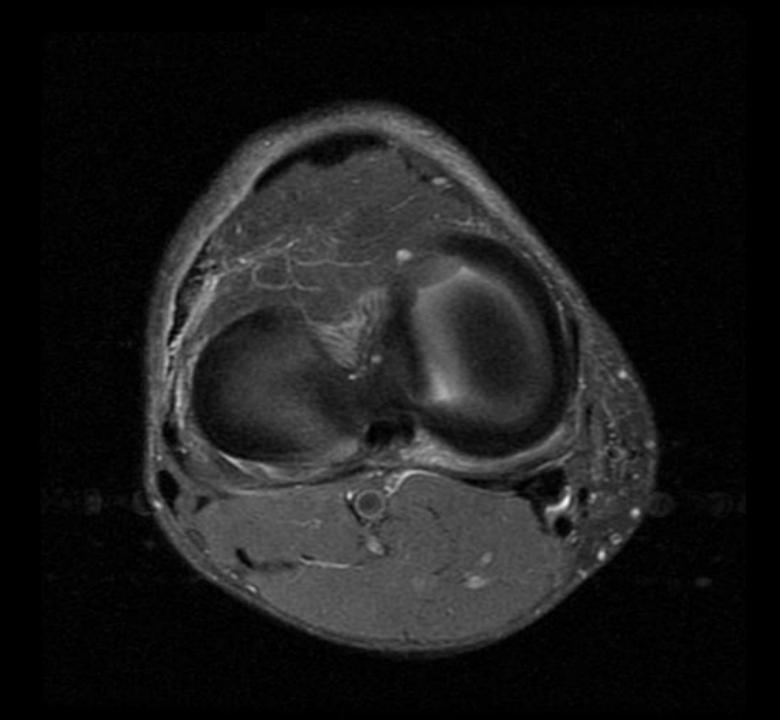


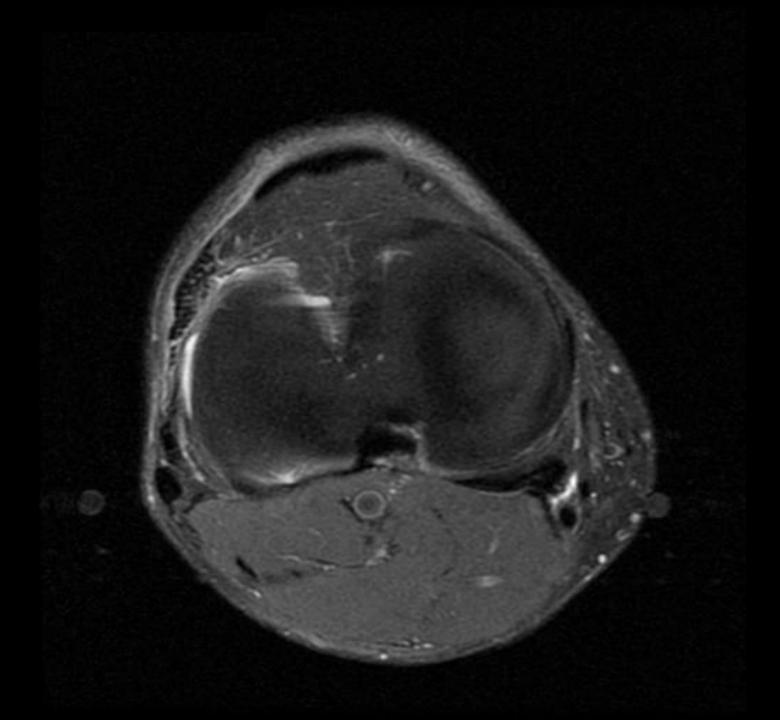


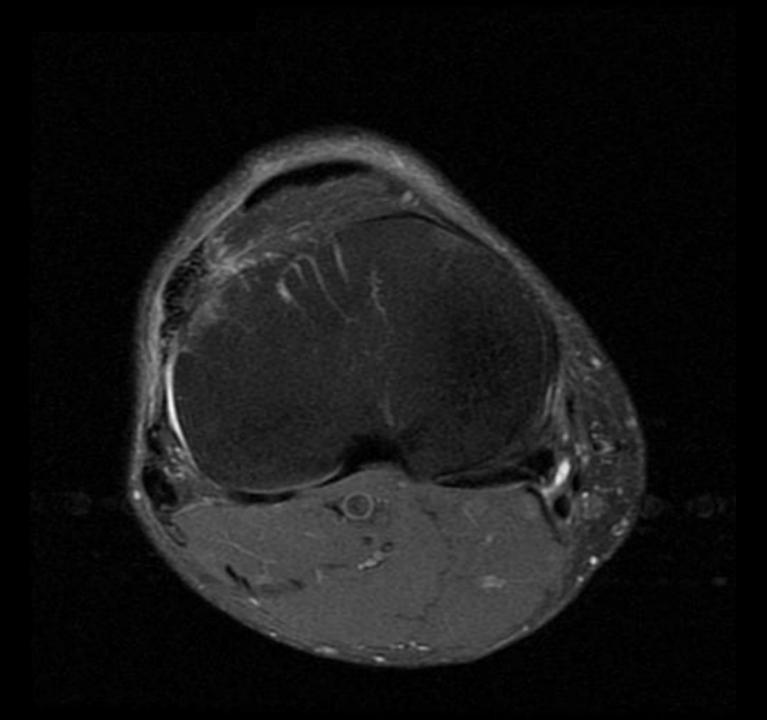


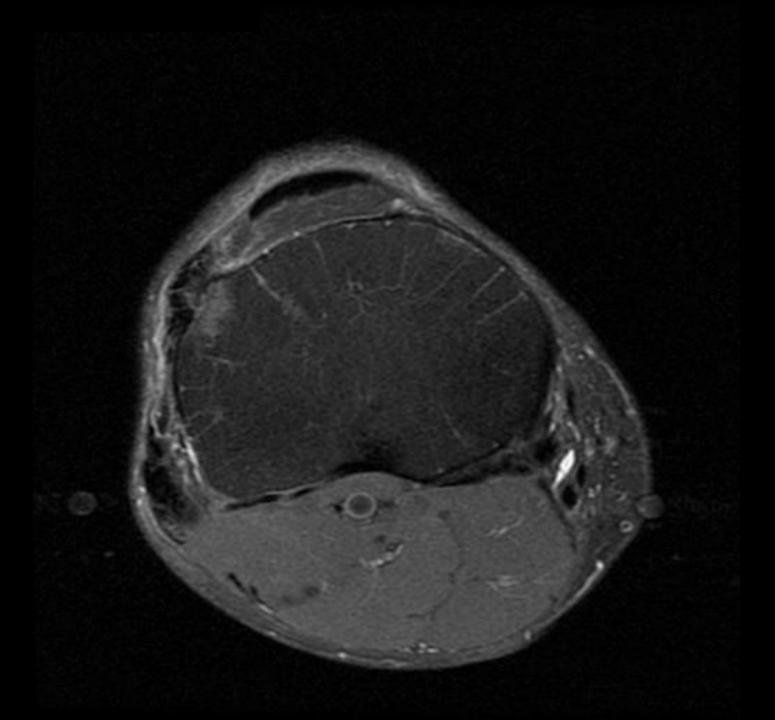


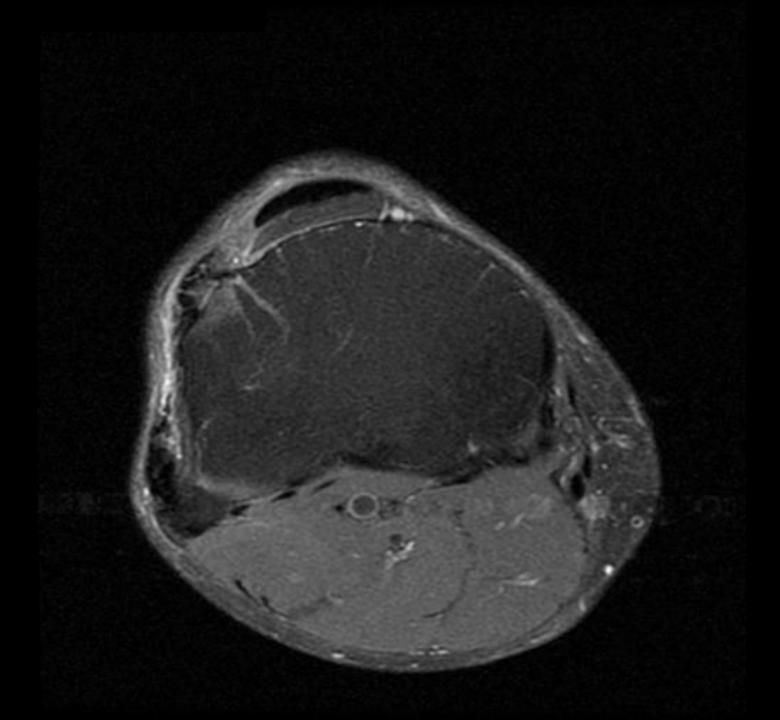


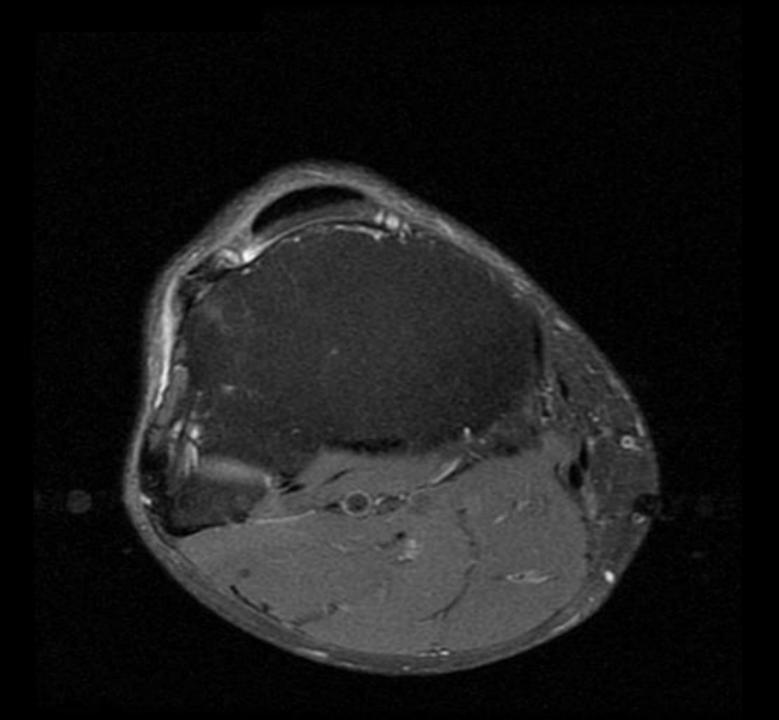


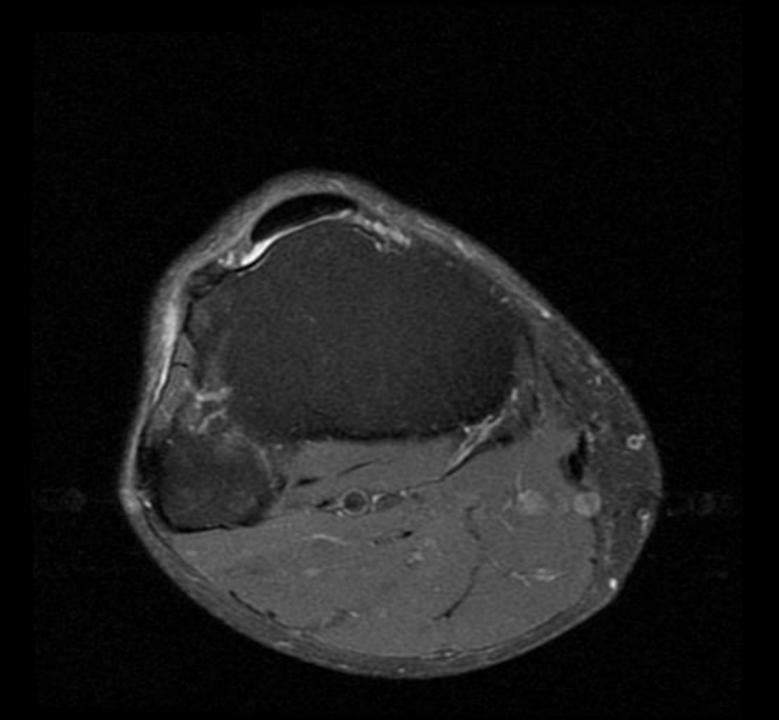


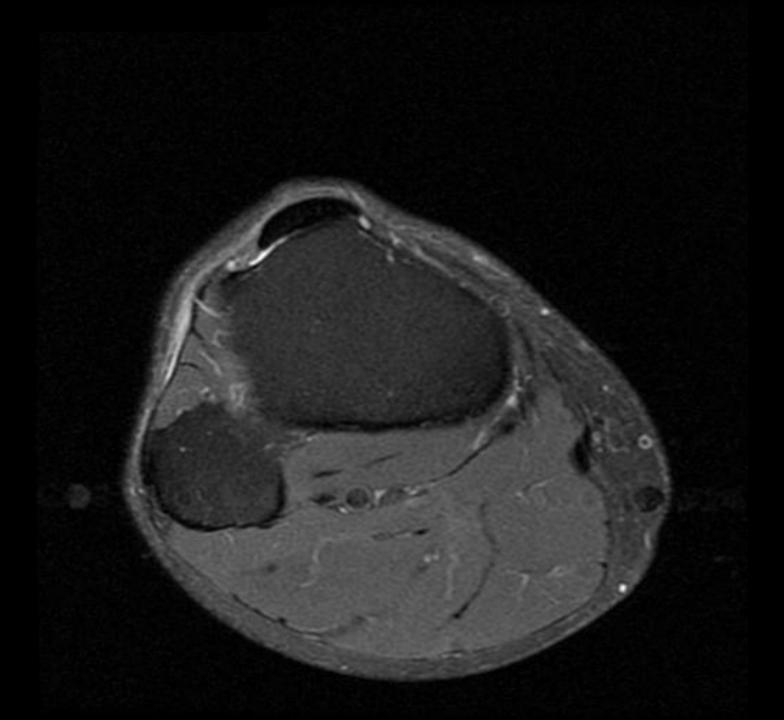


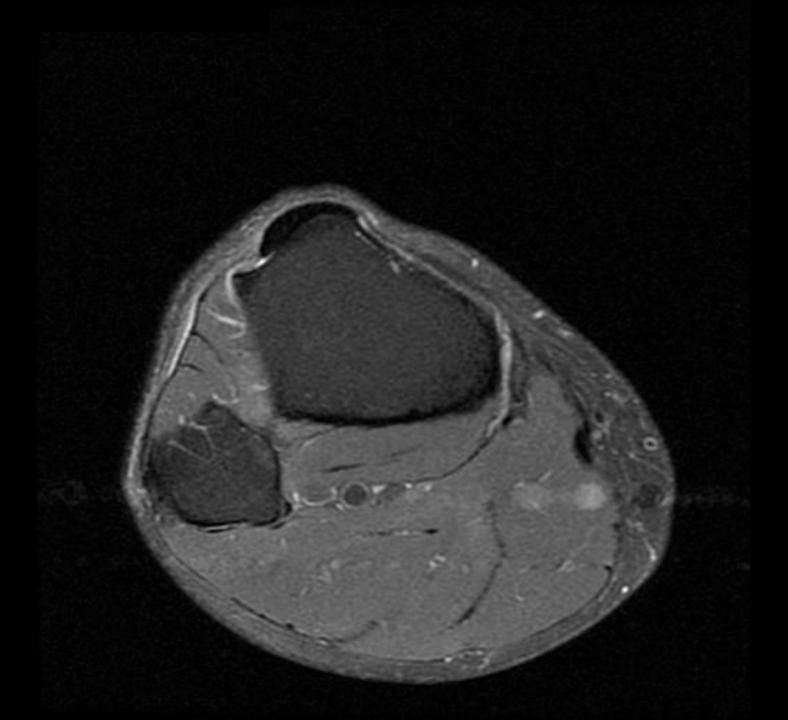


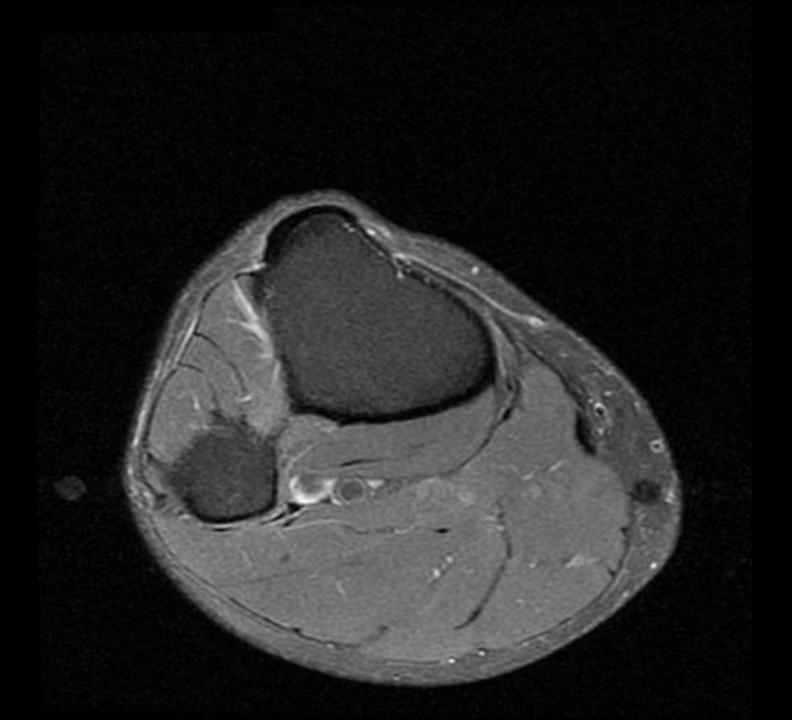


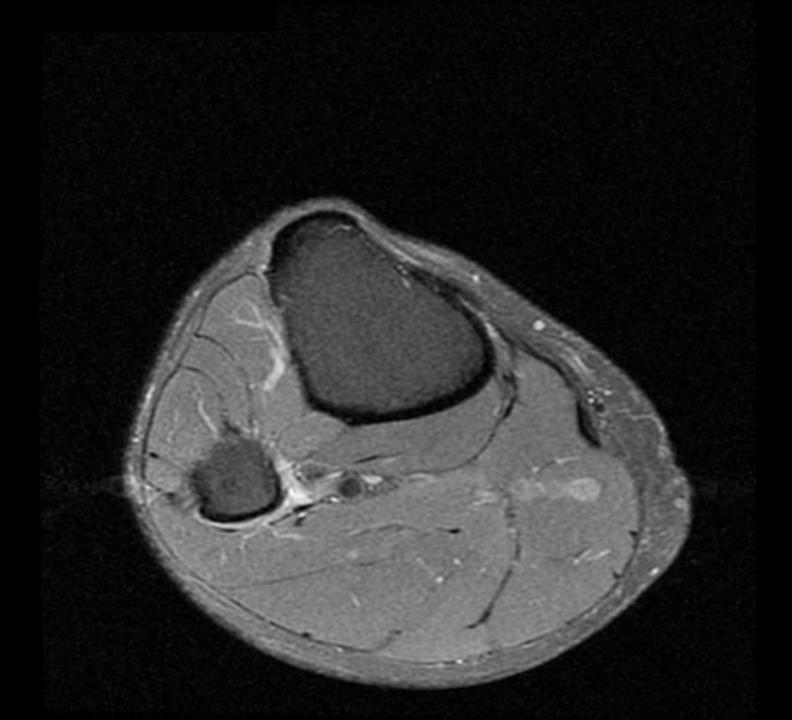


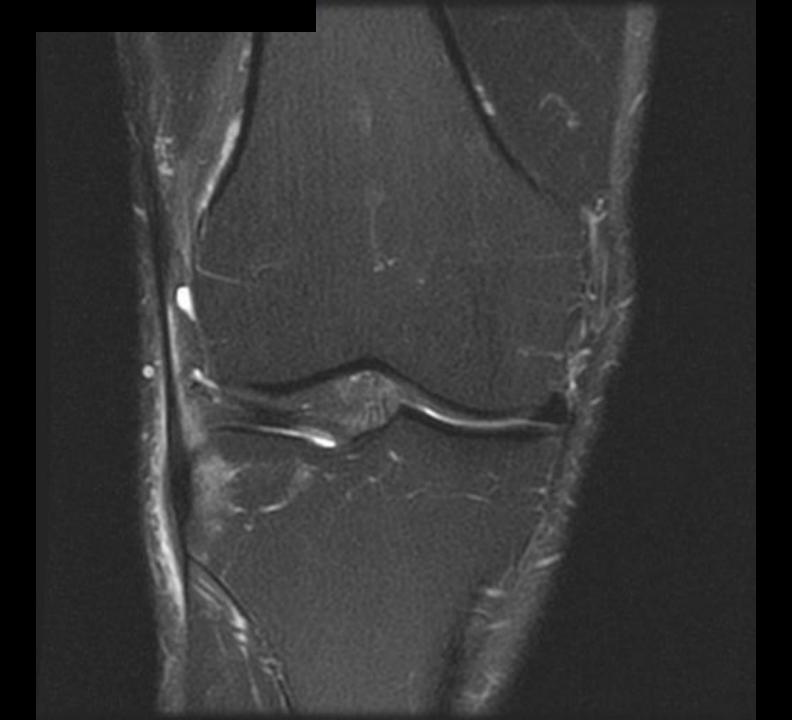




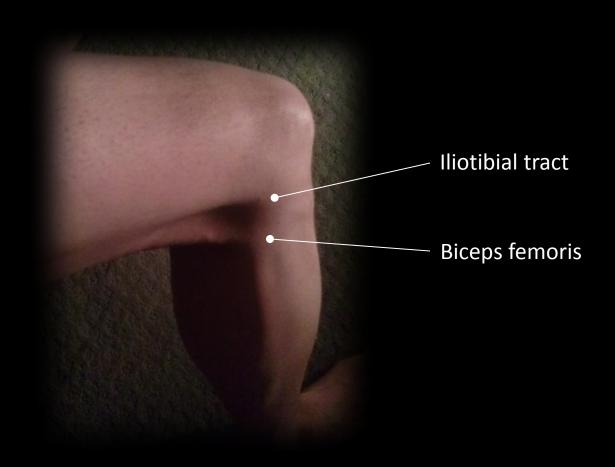








Surface Anatomy



Pathogenesis of ITT Syndrome



Iliotibial band friction syndrome: MR imaging findings in 16 patients and MR arthrographic study of six cadaveric knees.

Muhle et al.

Gross and MRI study of 6 cadaveric subjects

MRI study of 16 living subjects with controls

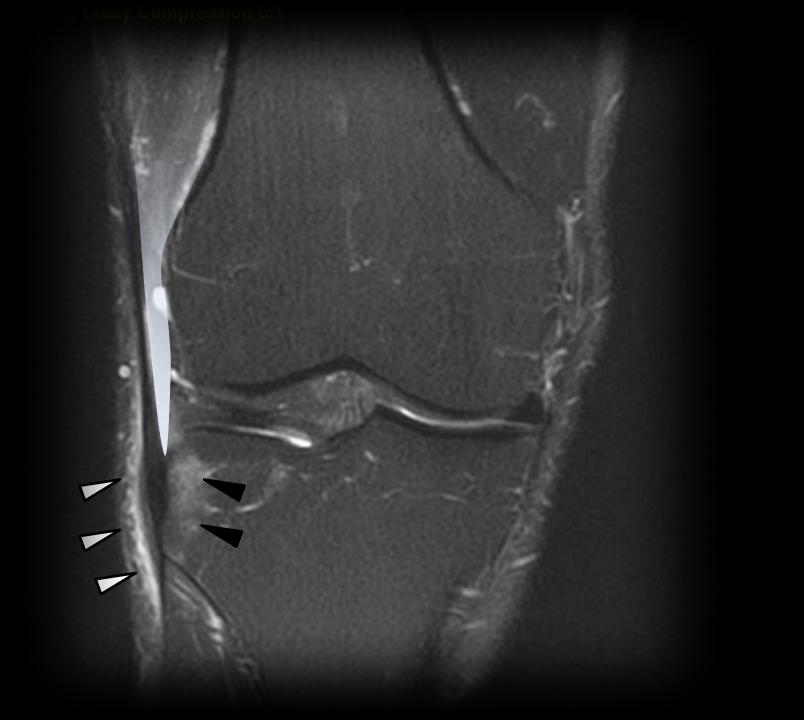
Anatomic Findings

The IT bursa is not an outpouching of the lateral recess

 The ITT is separated from the Lateral Femoral Condyle only by fat — not by a primary bursa

Imaging Findings

- Signal deep to ITT
 - Also superficial to ITT in 1 of 16
- ITT signal normal
- ITT thickness not significantly different
- Frank fluid collections rare
- Associated with effusions and meniscal tears



What's Unusual About This Case

Signal superficial to the ITT

Marrow edema within Gerdy's tubercle

Signal within the ITT / Thickening of the ITT (?)

Is this just an atypical ITT syndrome, or is it something else?

Other Work

"Ill-defined ... signal intensity ... was present deep to the [ITT], adjacent to the lateral femoral epicondyle ... and also superficial ... in two cases. The signal ... did not seem to involve the ITB itself but rather the contiguous soft-tissue planes."

"... signal consistent with fluid was seen deep to the [ITT] in the region of the lateral femoral epicondyle in five of the seven cases. Additionally, when compared with the control group, patients with iliotibial band syndrome demonstrated a significantly thicker [ITT] over the lateral femoral epicondyle (P < 0.05)."

"The MR finding suggested soft tissue inflammation and/or edema rather than focal fluid collection in the bursae. ... The ITB itself did not show any signal alteration or increased thickness."

"... an ill-defined area of ... signal ... situated immediately below the [ITT] lateral to the external condyle of the femur. No thickening of the [ITT] or changes in its signal intensity were observed. Osseous edema and subchondral osseous erosion in the external condyle of the femur were observed in both cases."

"... may demonstrate thickening and reactive soft tissue and osseous inflammation."

Stoller DW, ed. Magnetic Resonance Imaging in Orthopaedics and Sports Medicine, Volume 1. Lippincott Williams & Wilkins, 2007. Page 616.

"Avulsion Fracture of the Gerdy's Tubercle: ... In the absence of the avulsion fracture, inflammation of the ITB attachment site (=Gerdy's tubercle) may occur following chronic irritation."