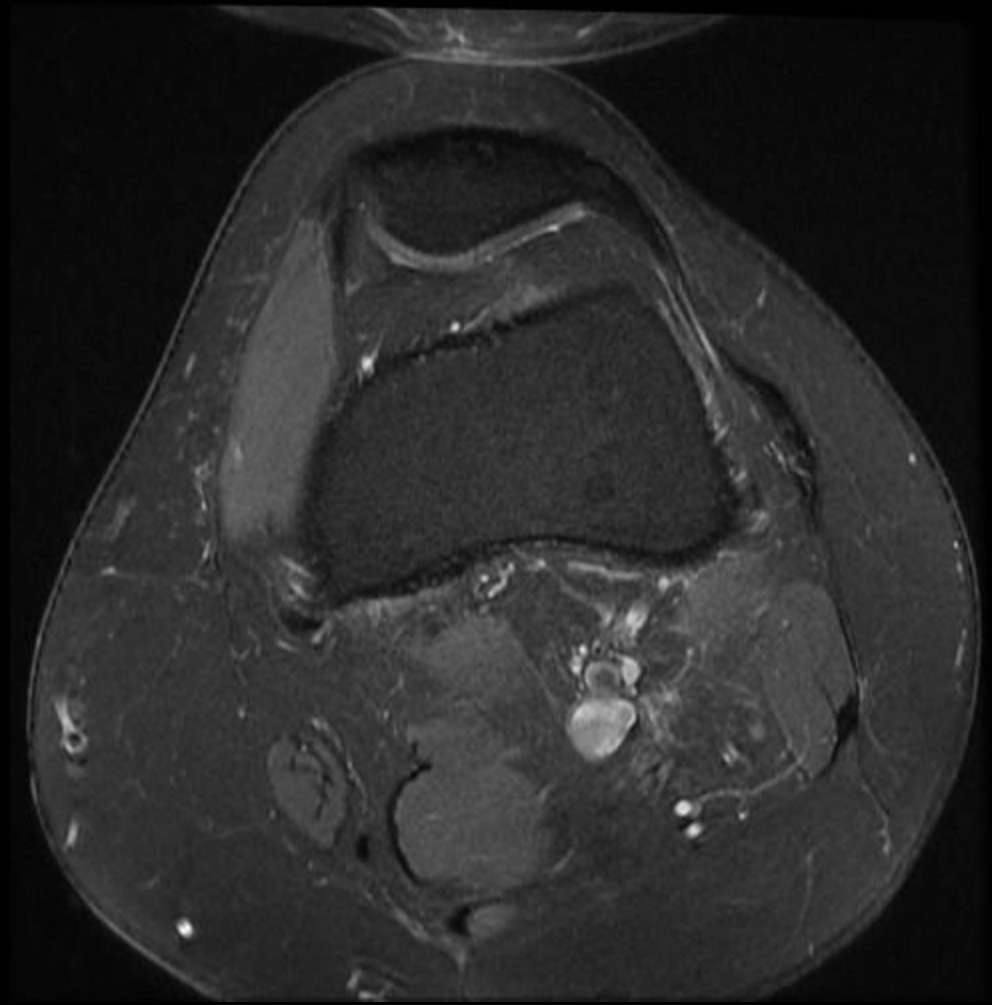
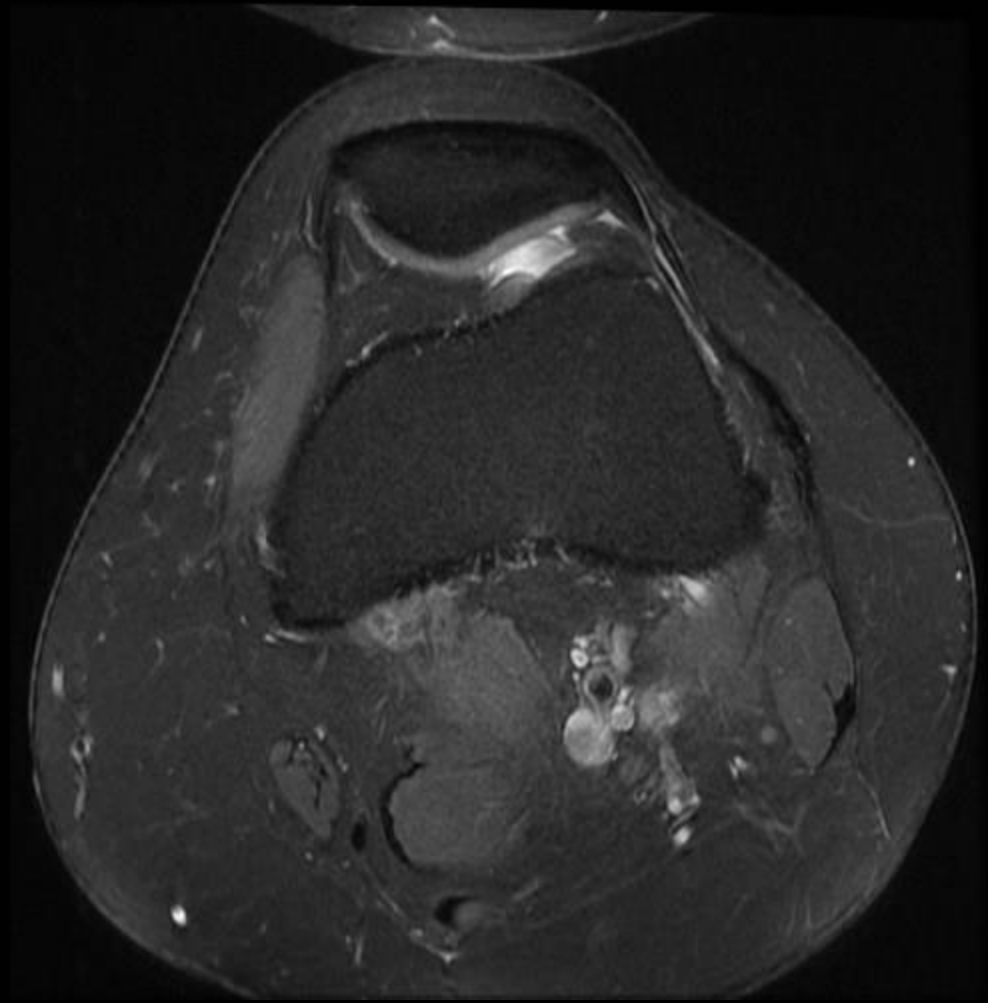
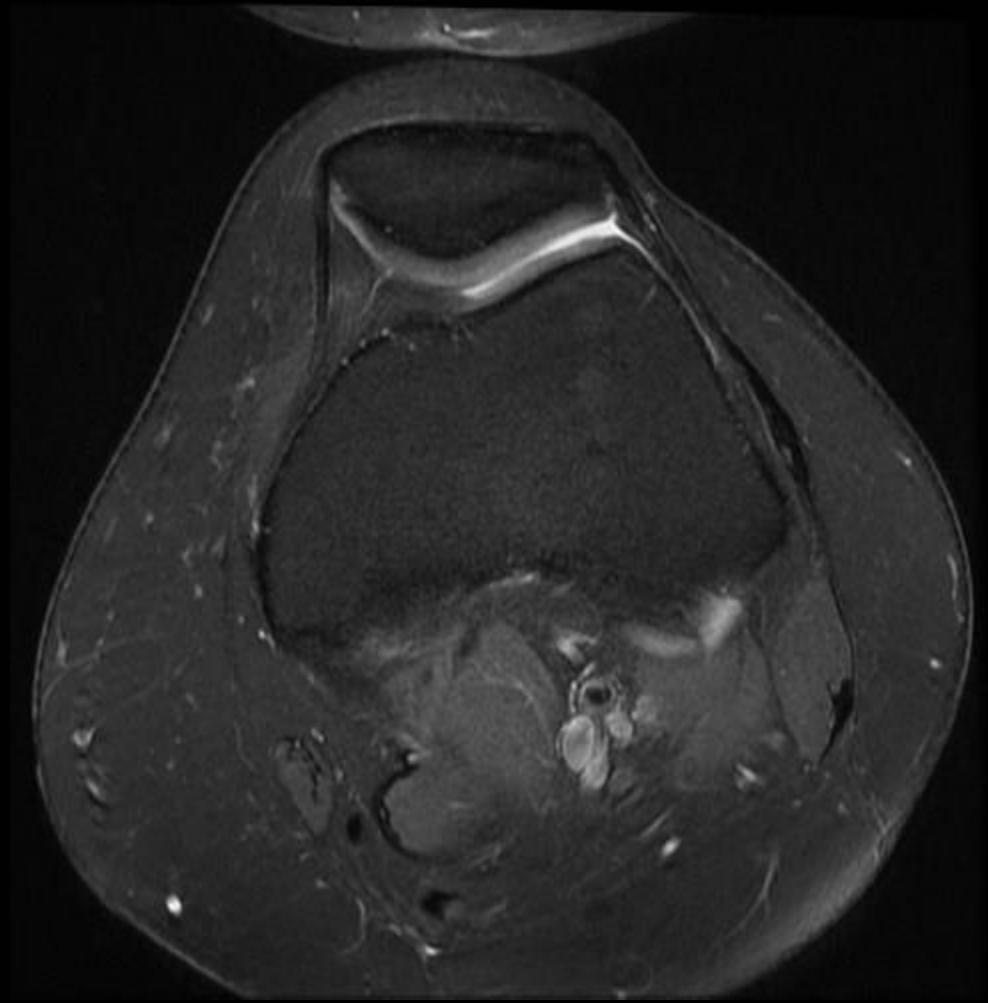
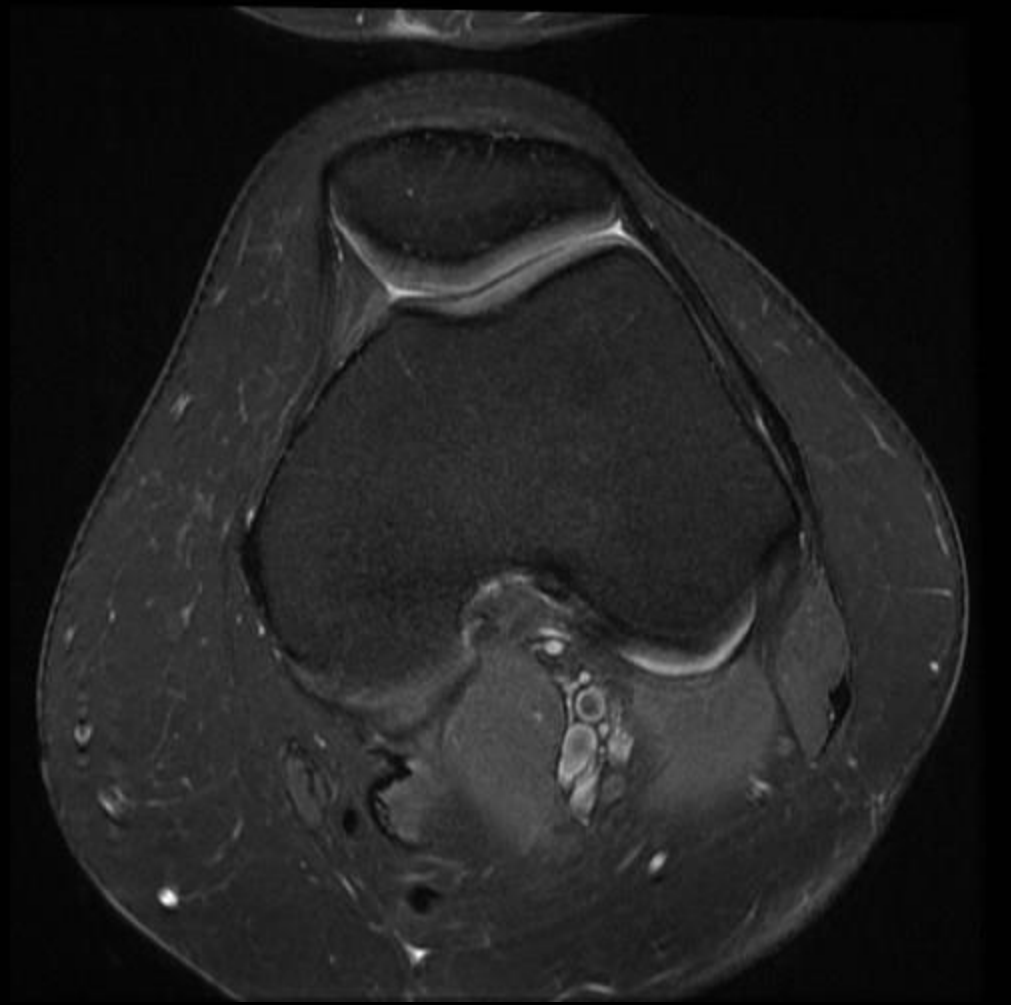
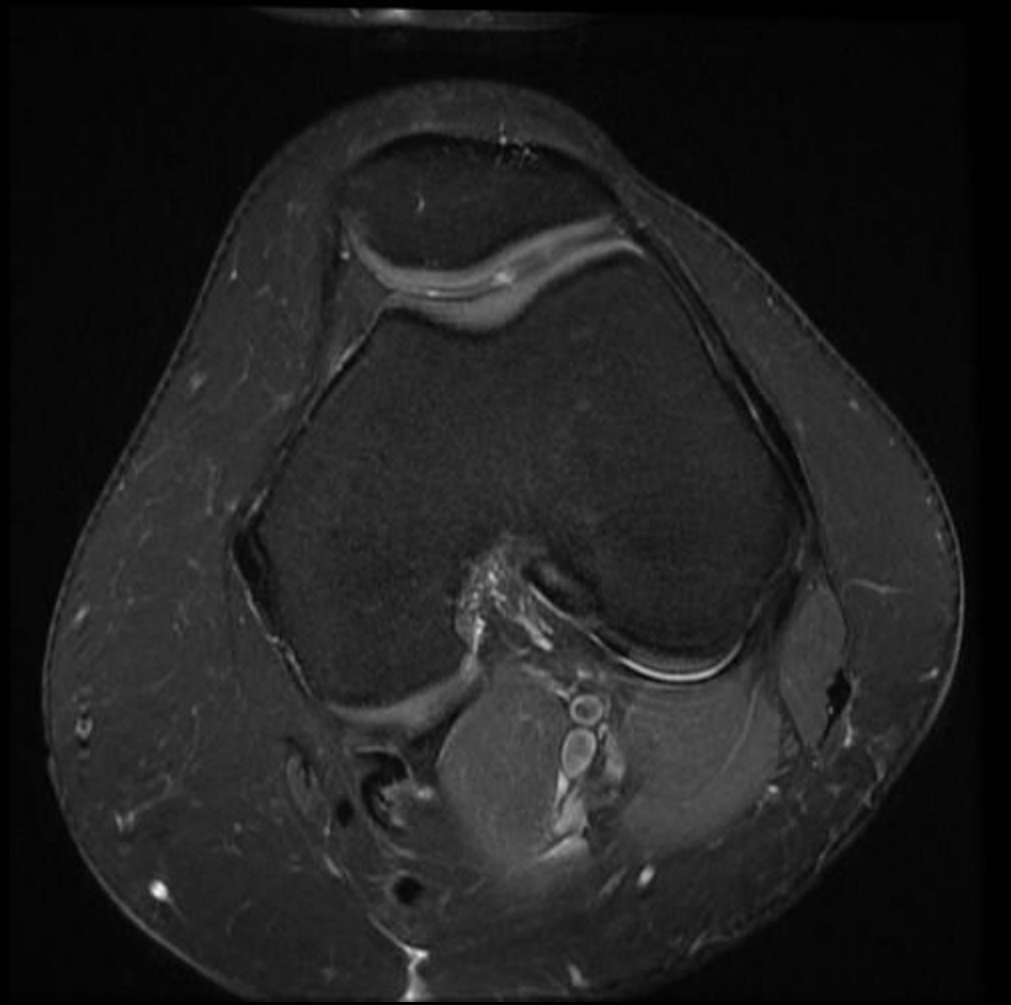
33 F with left knee pain and swelling

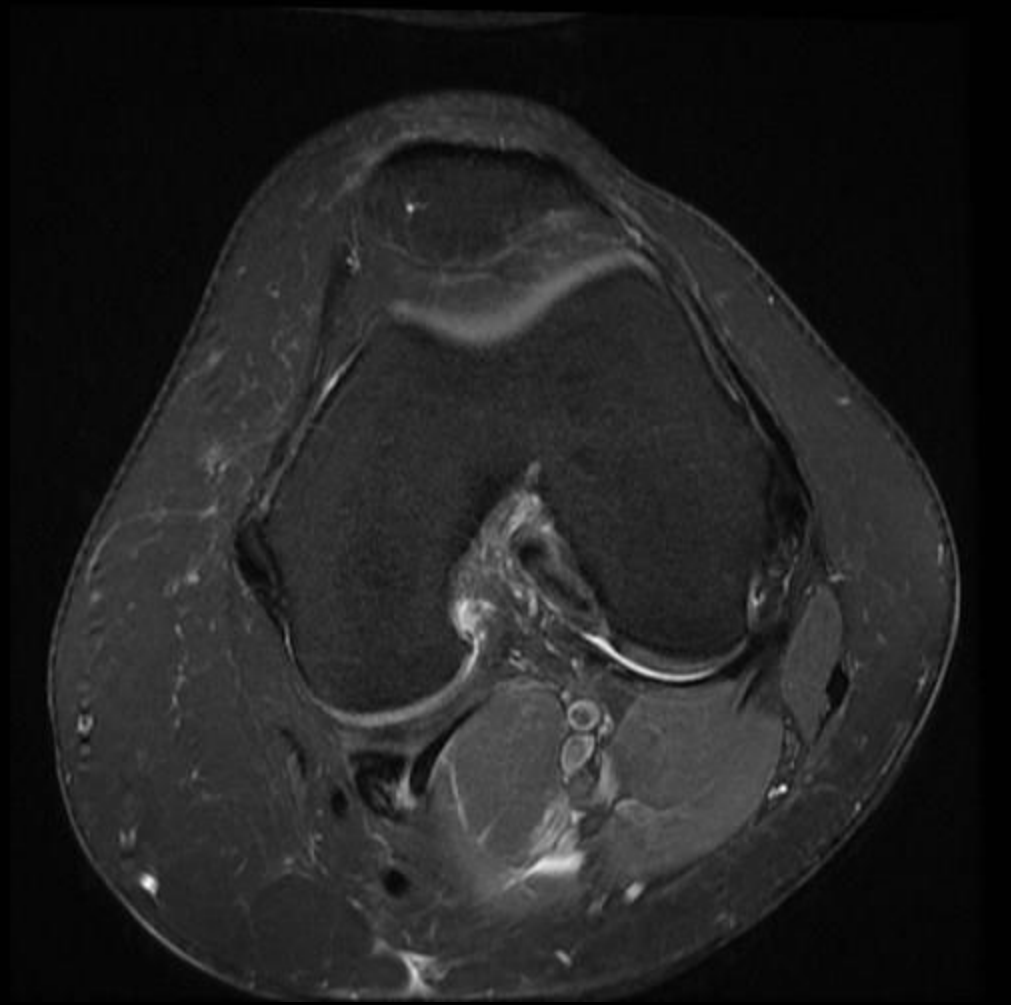


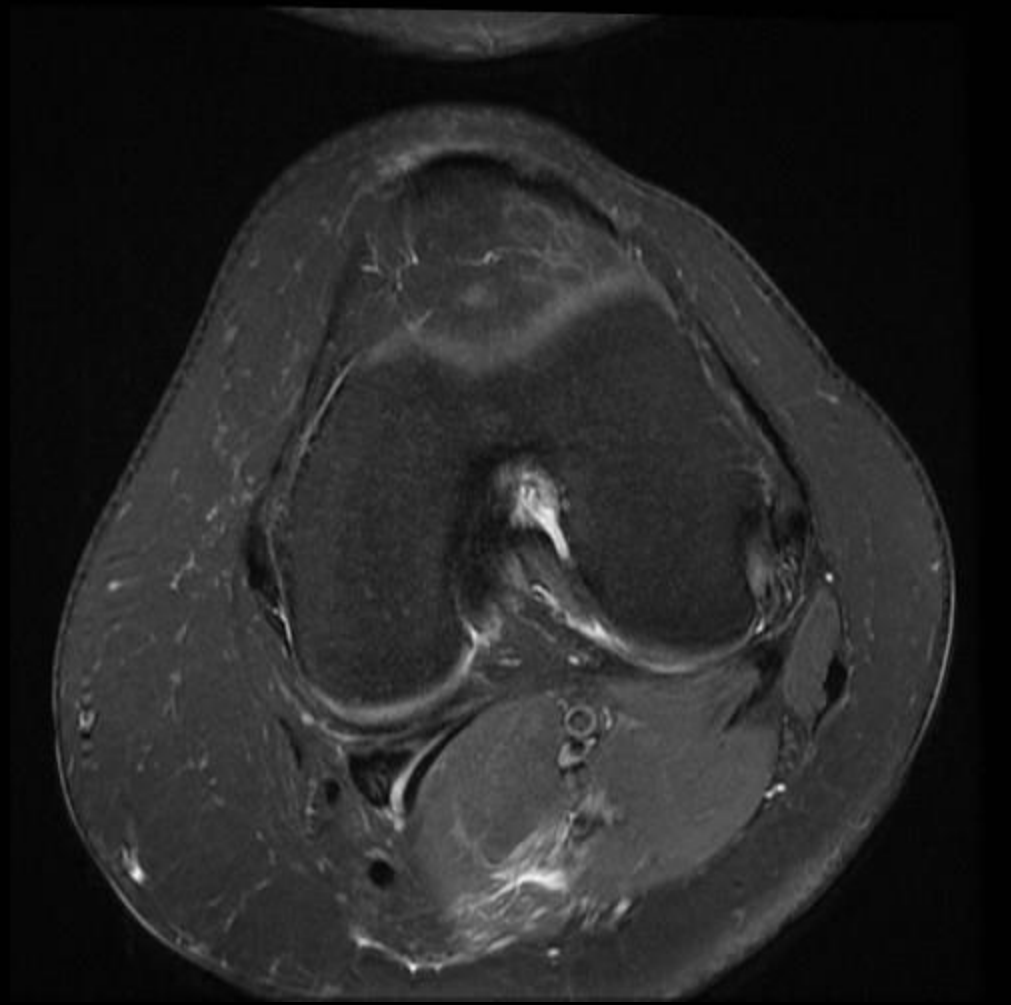


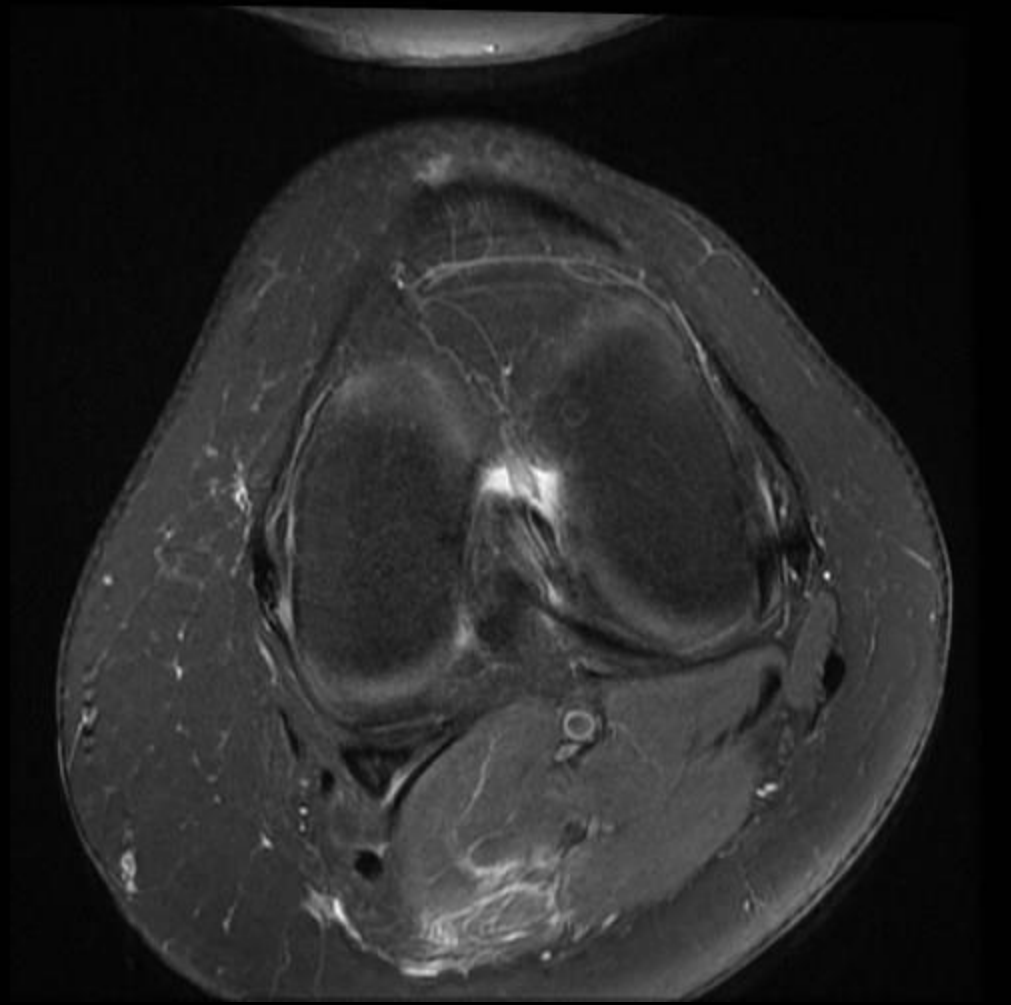


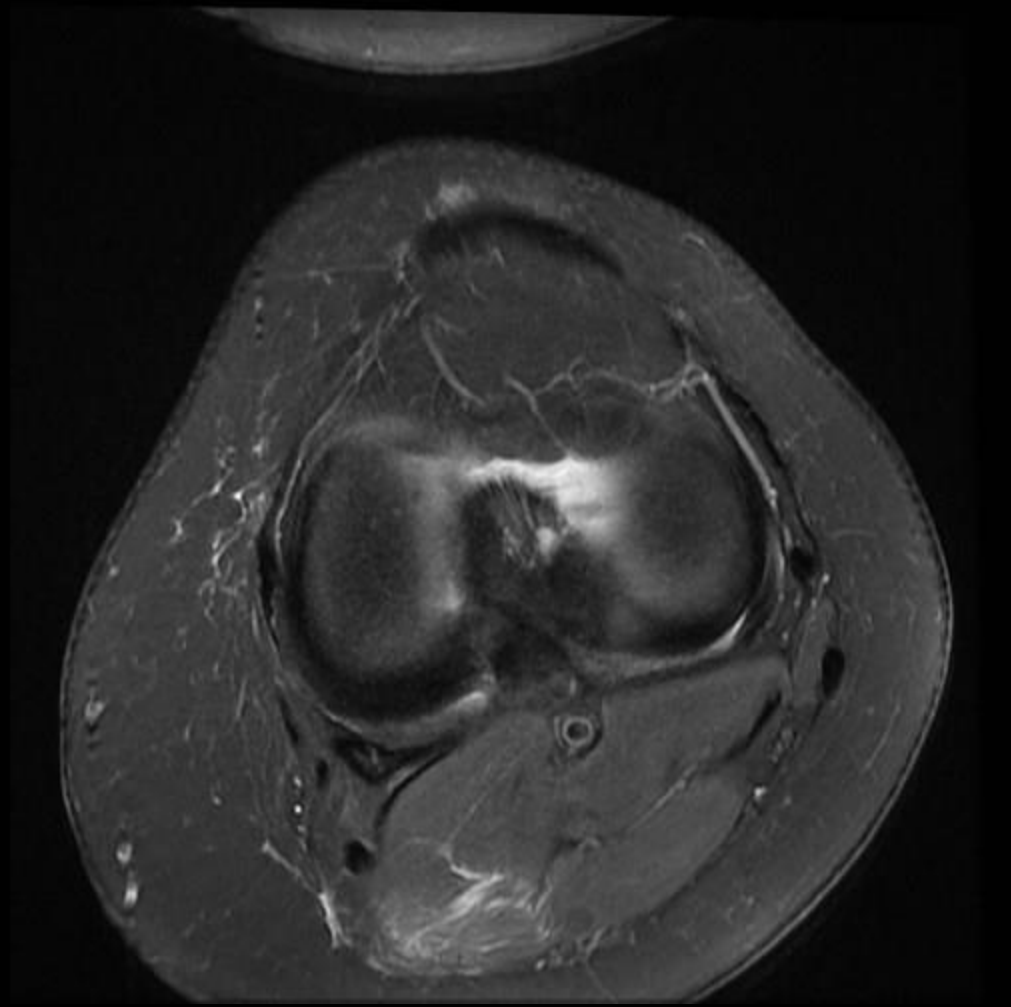


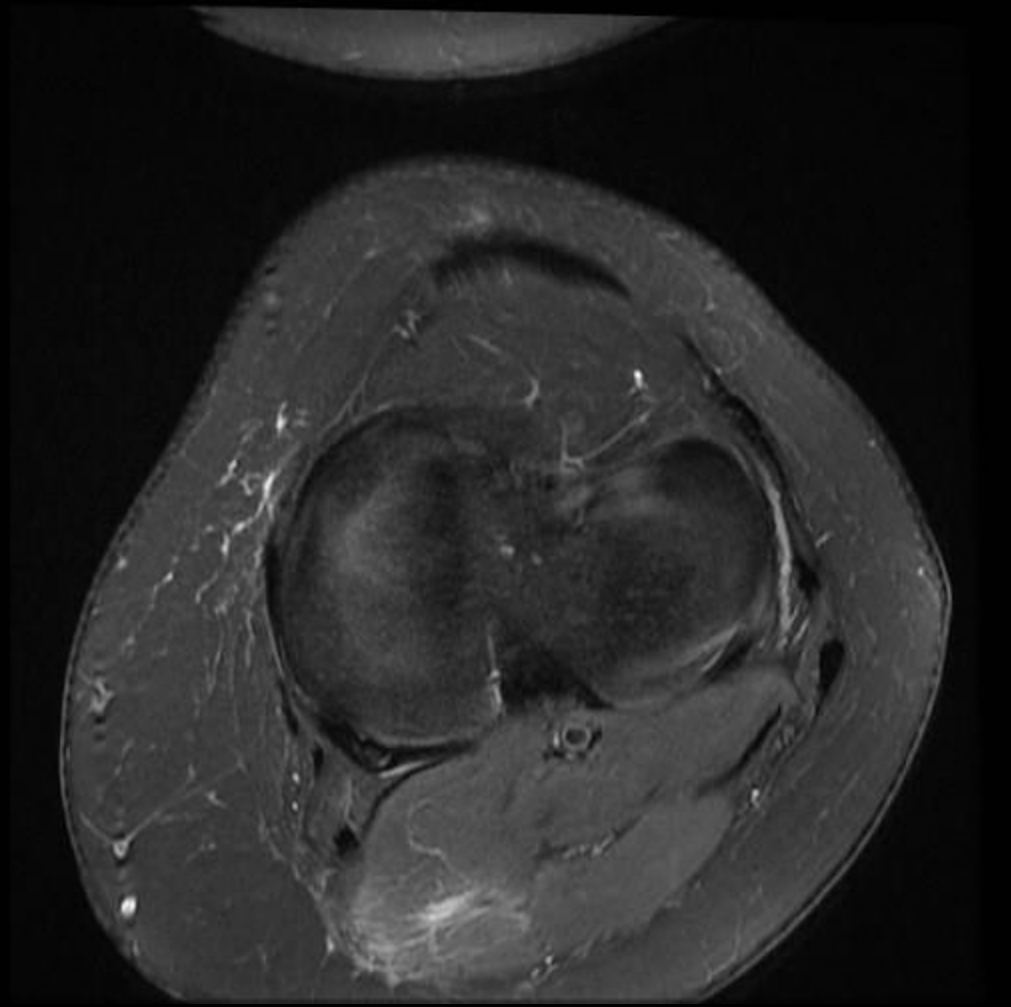


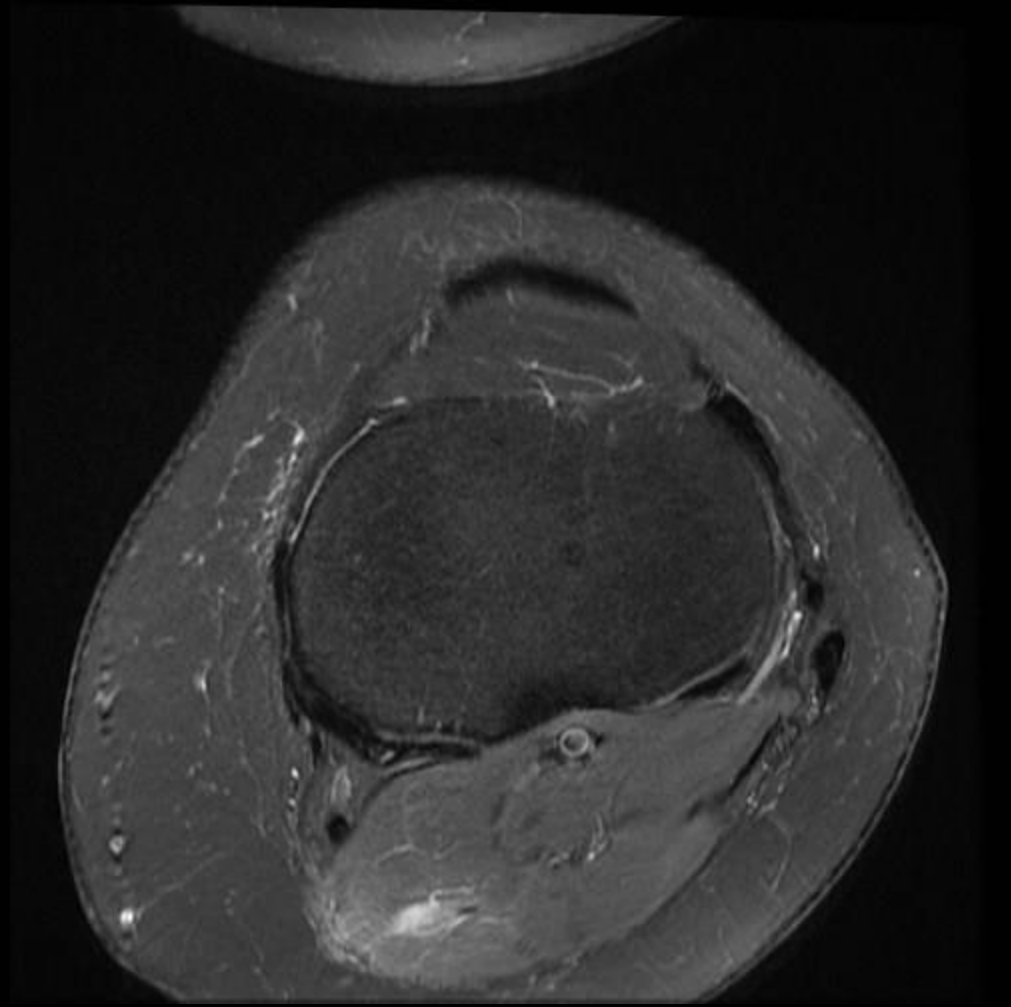


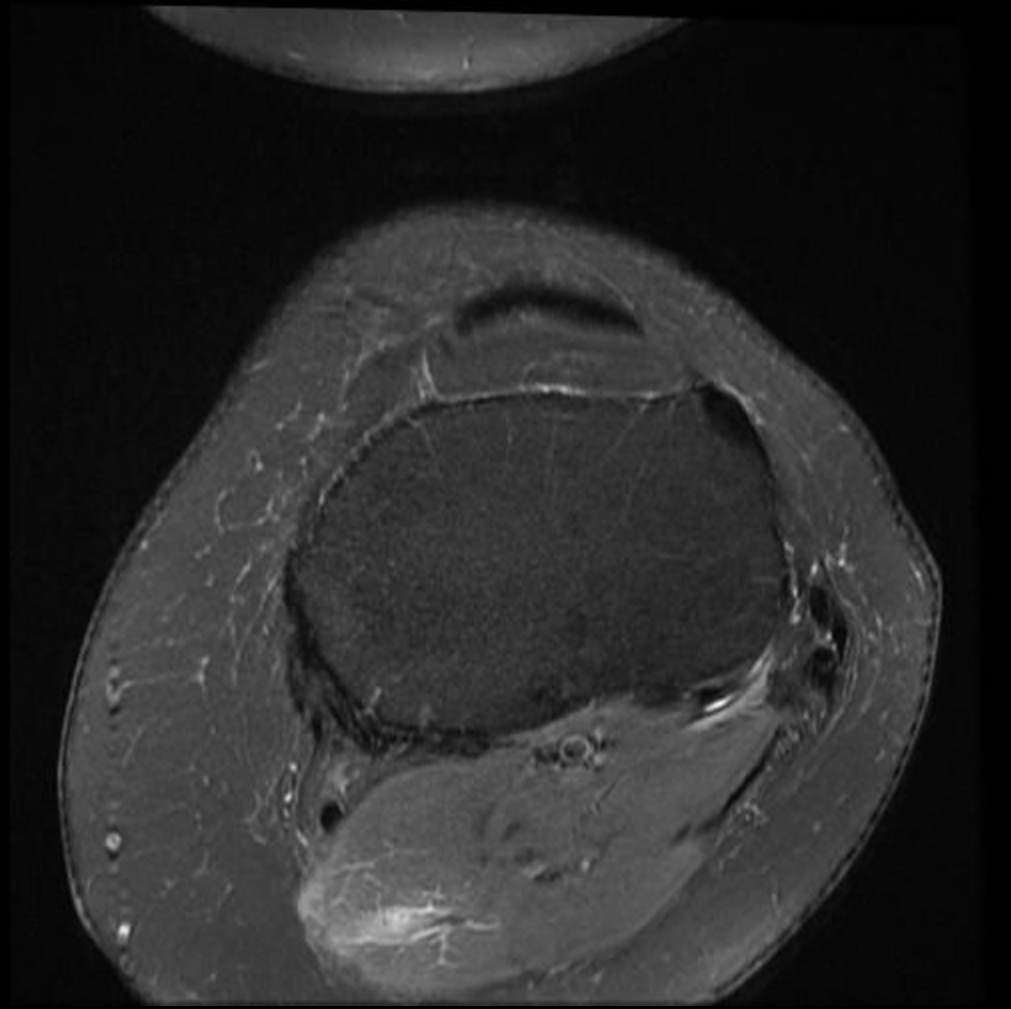


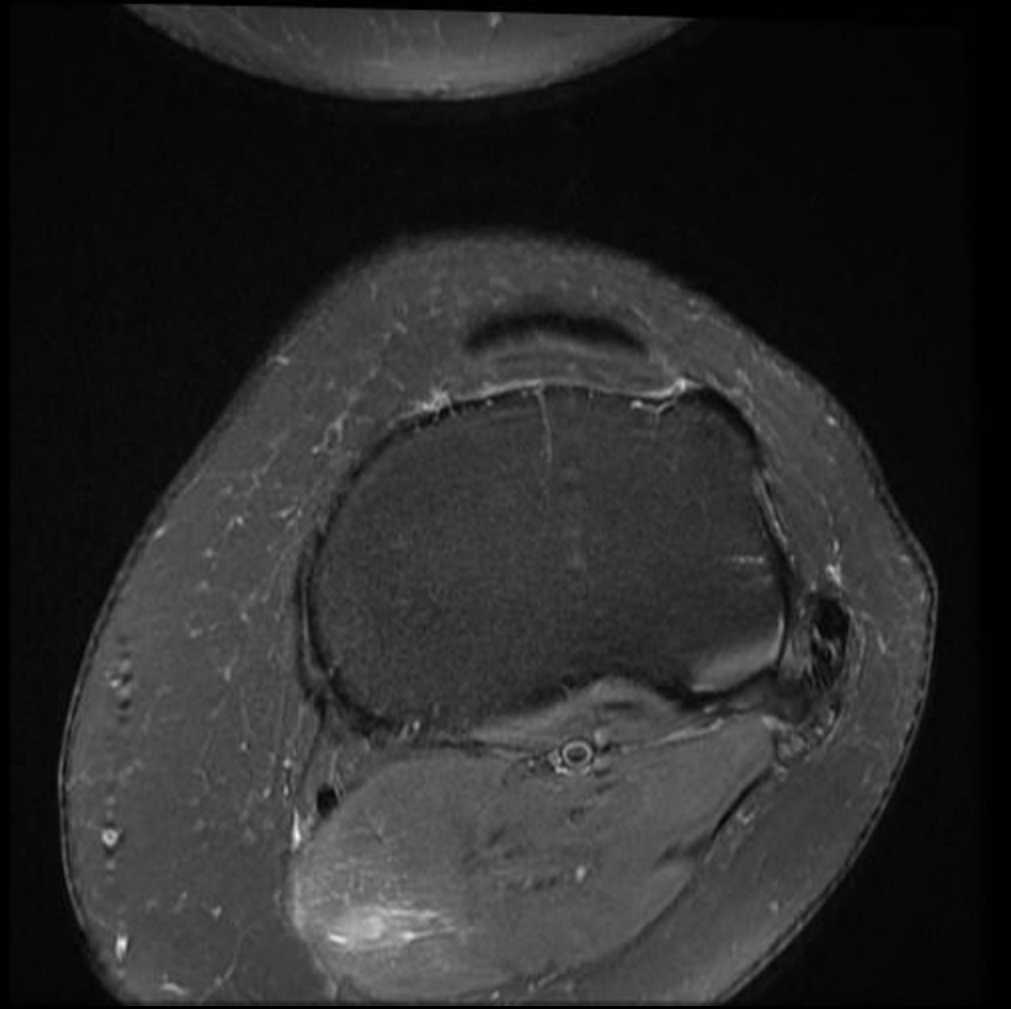


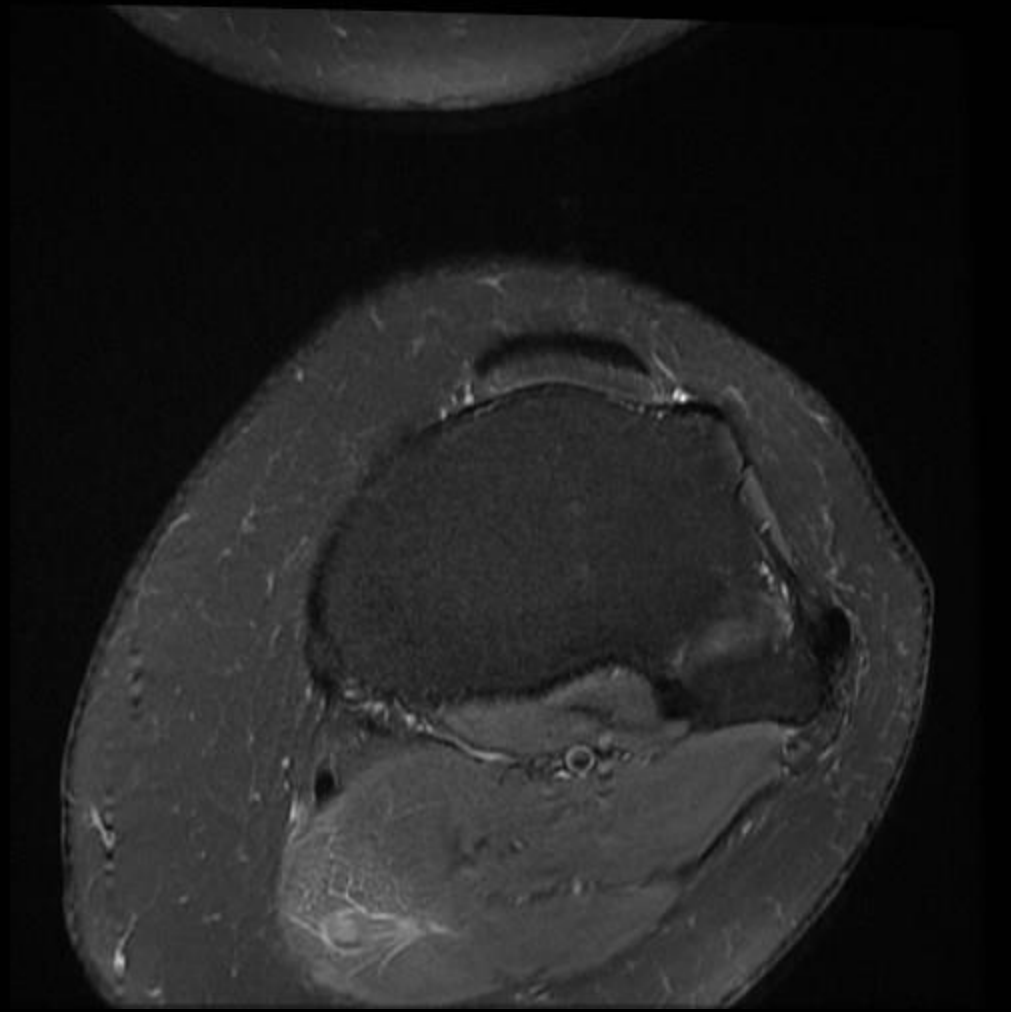


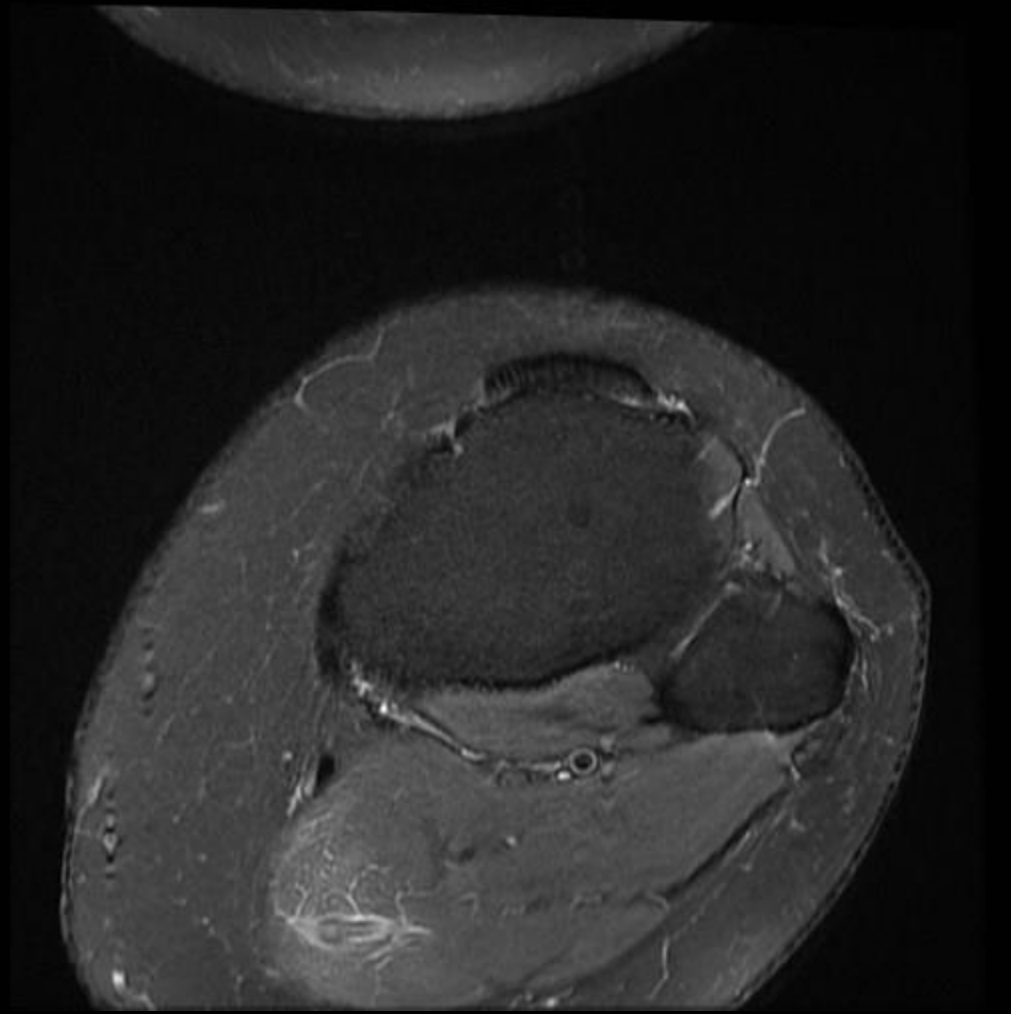


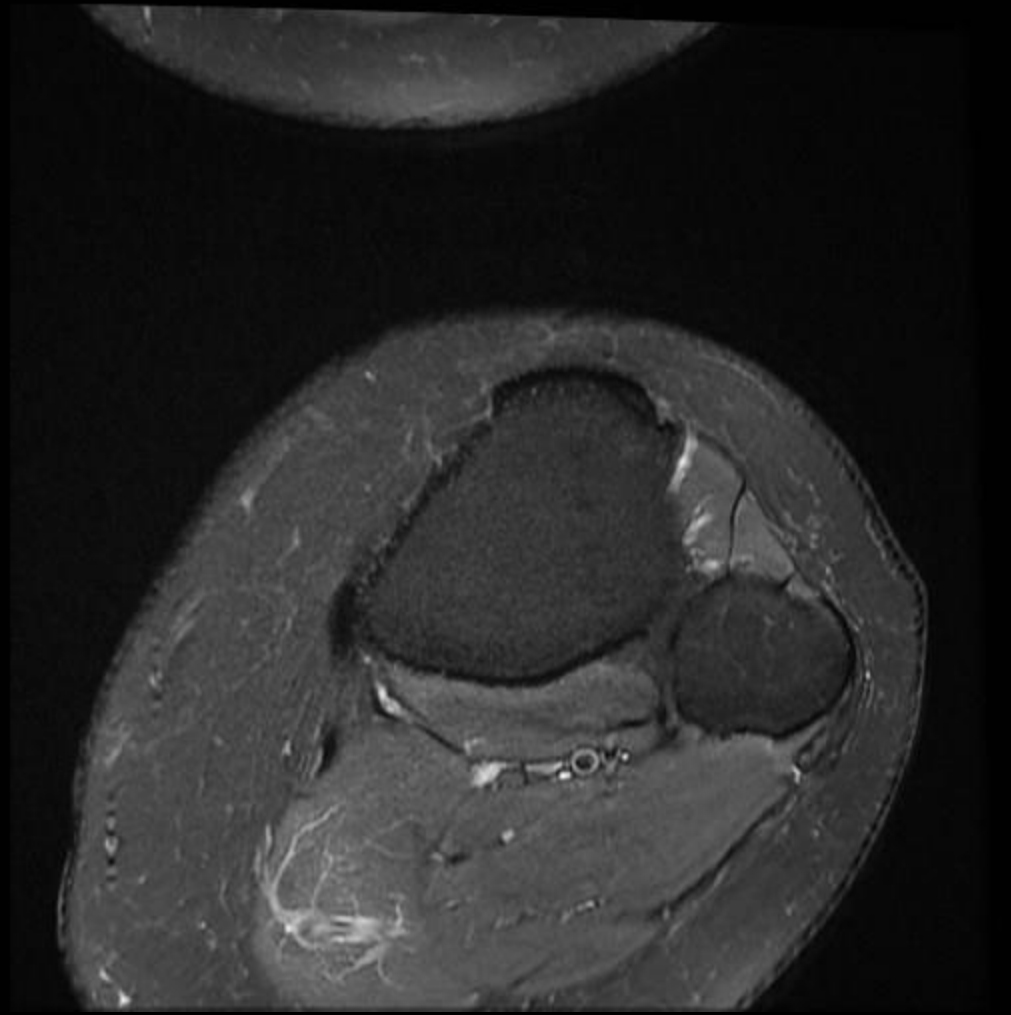


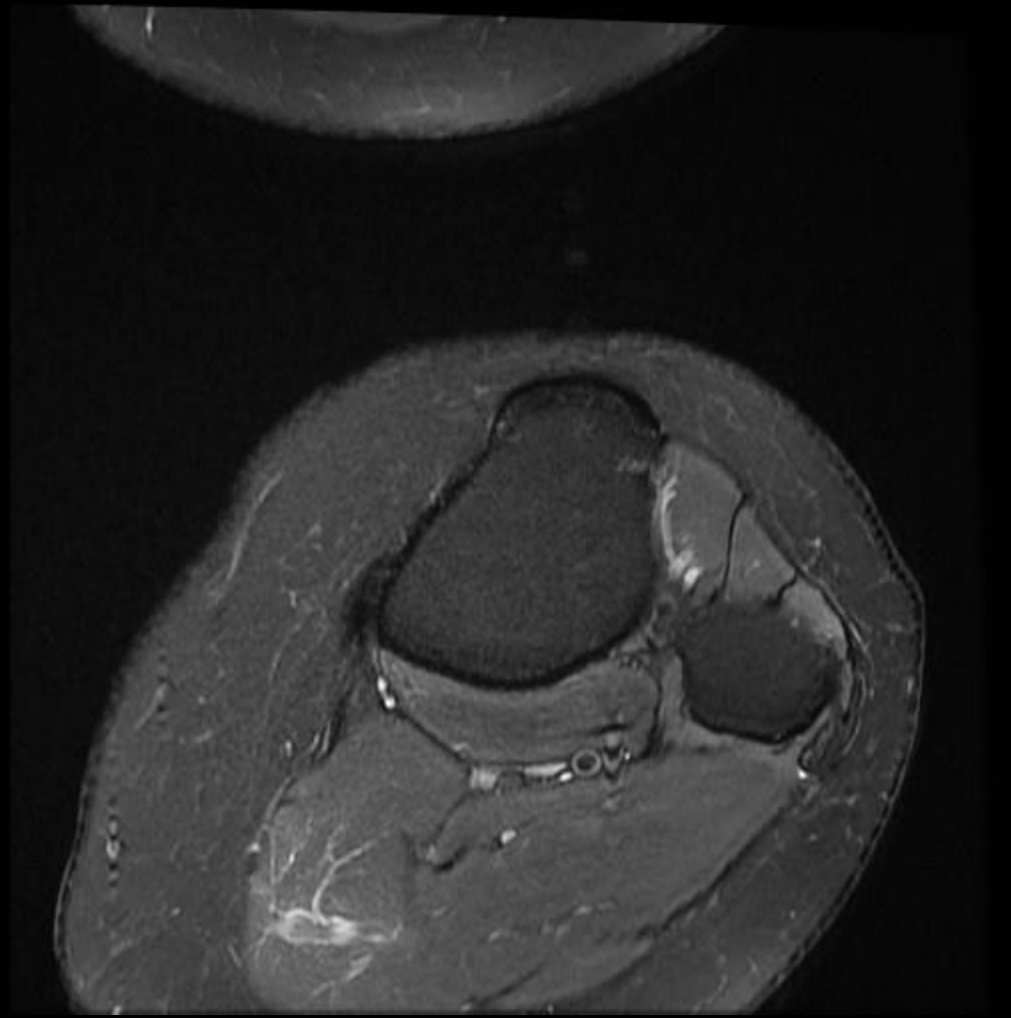


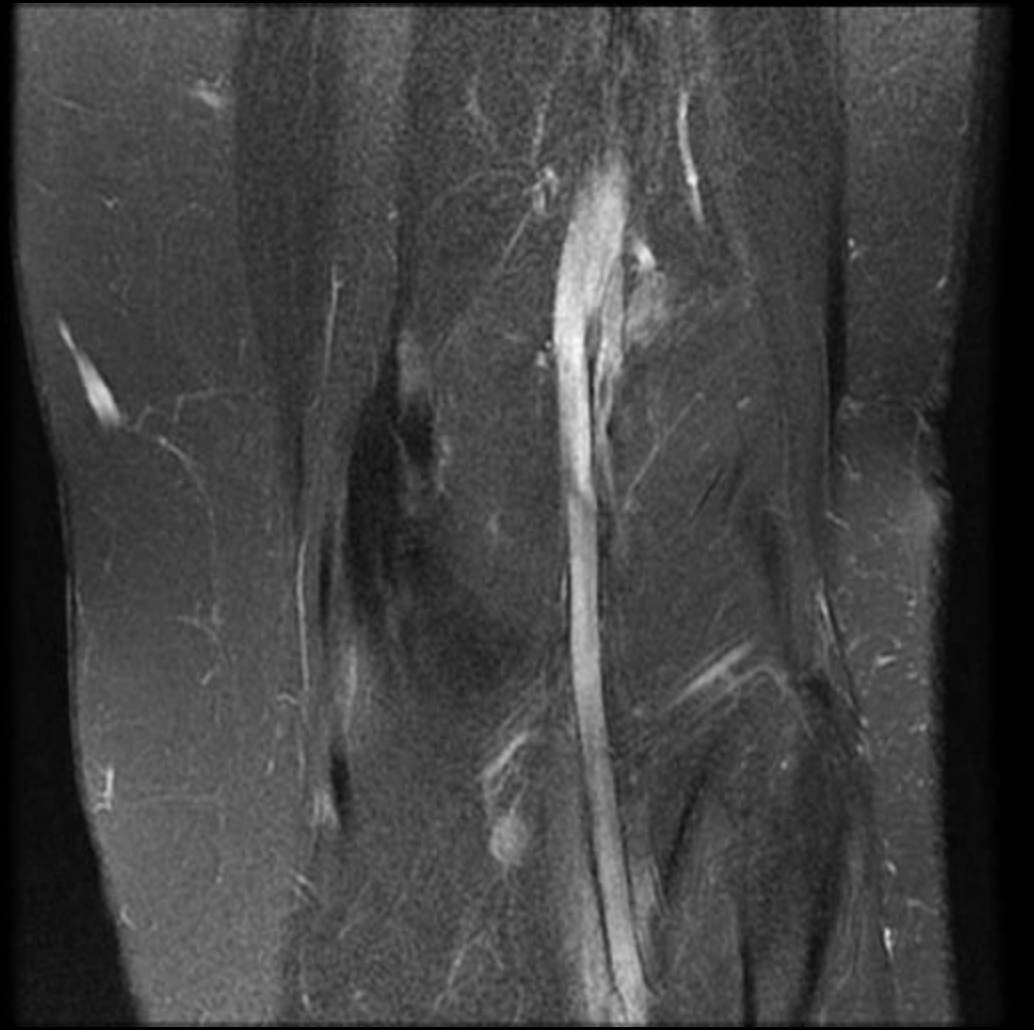


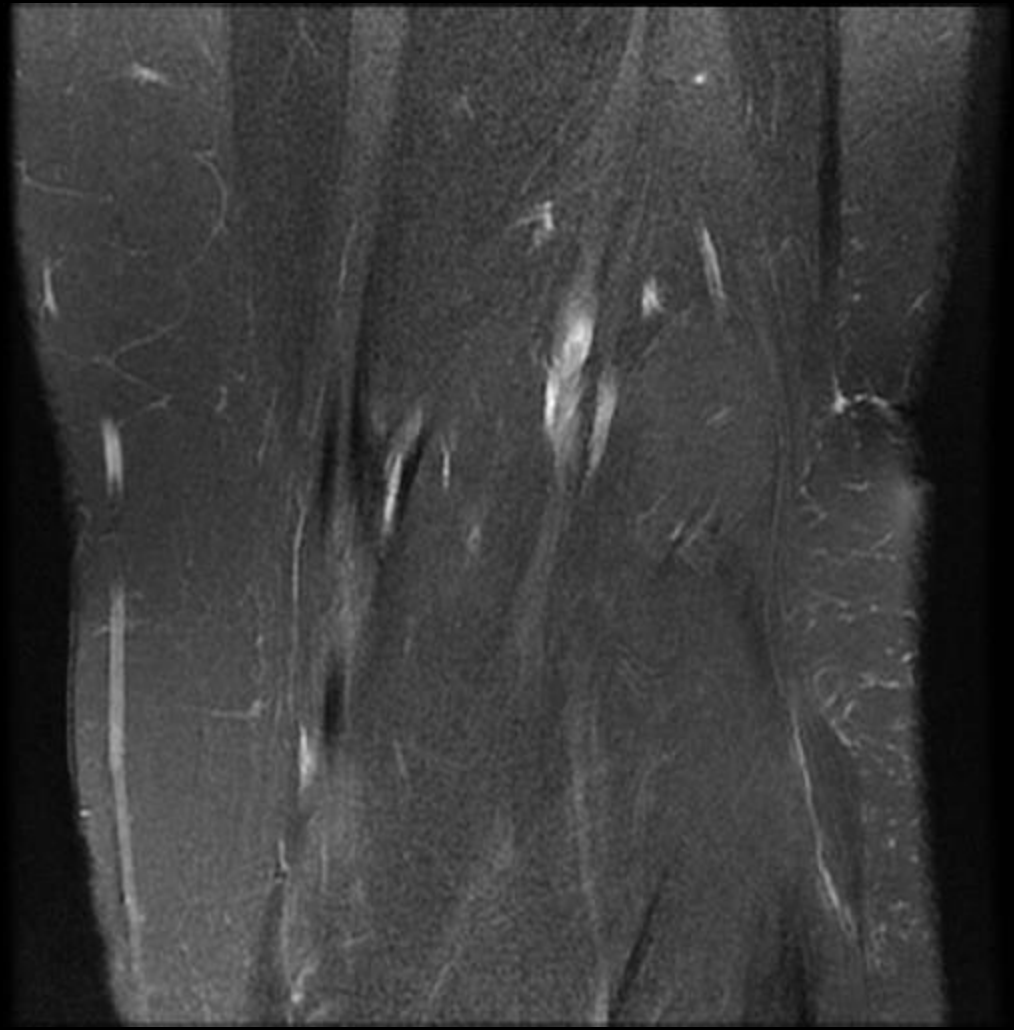


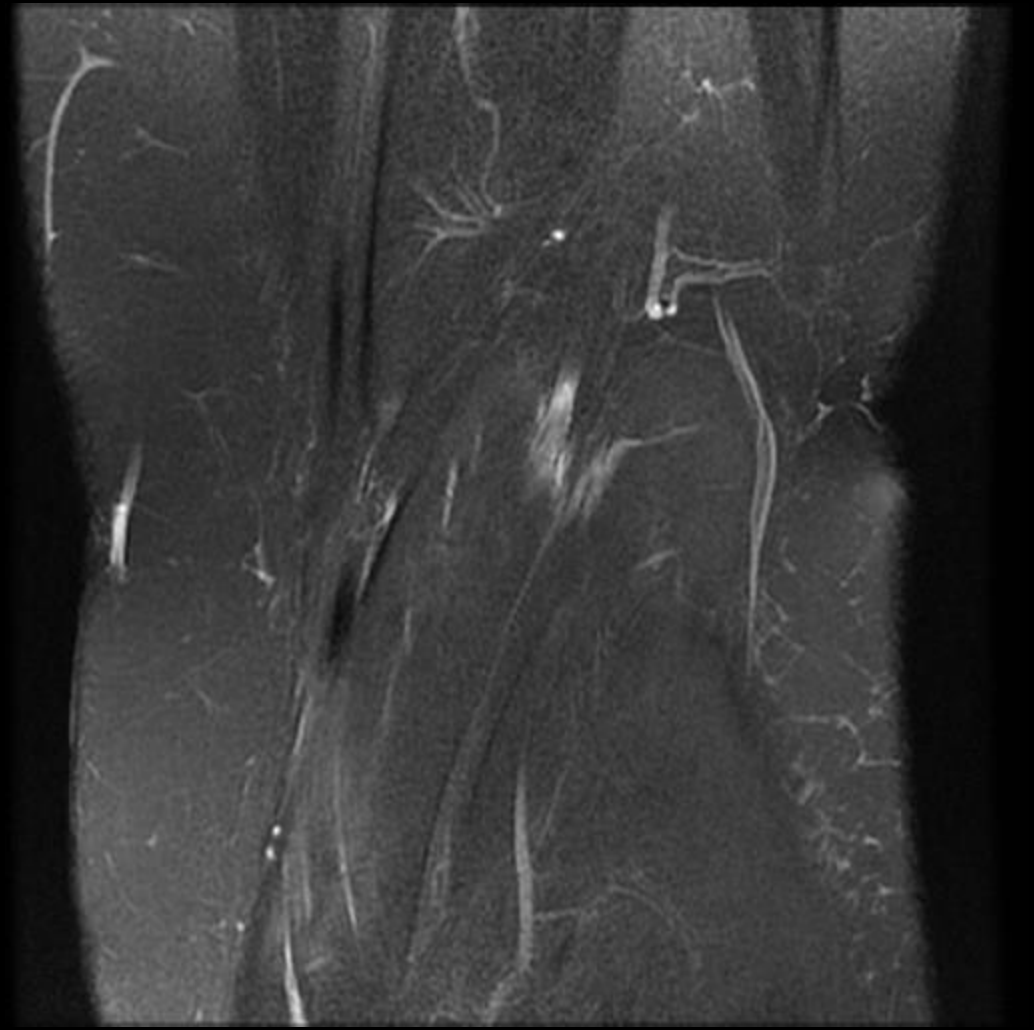


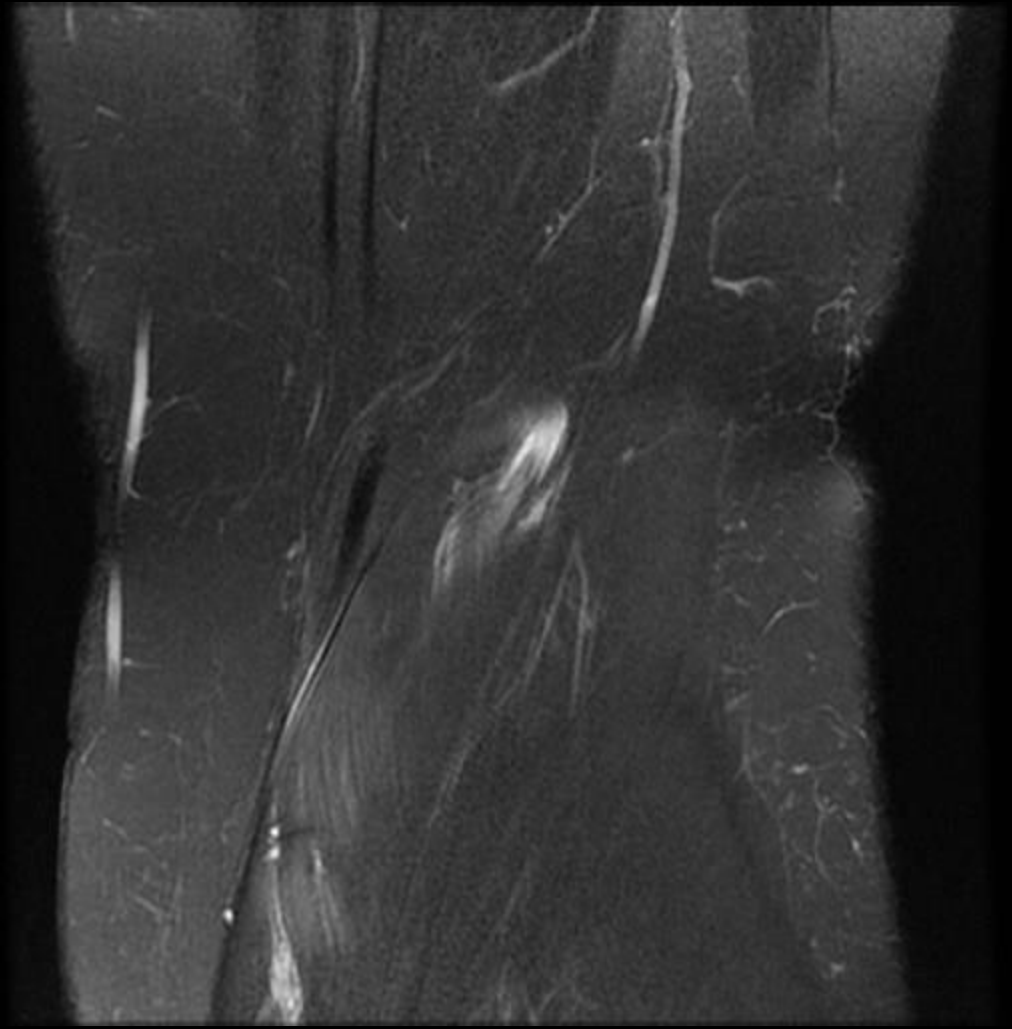


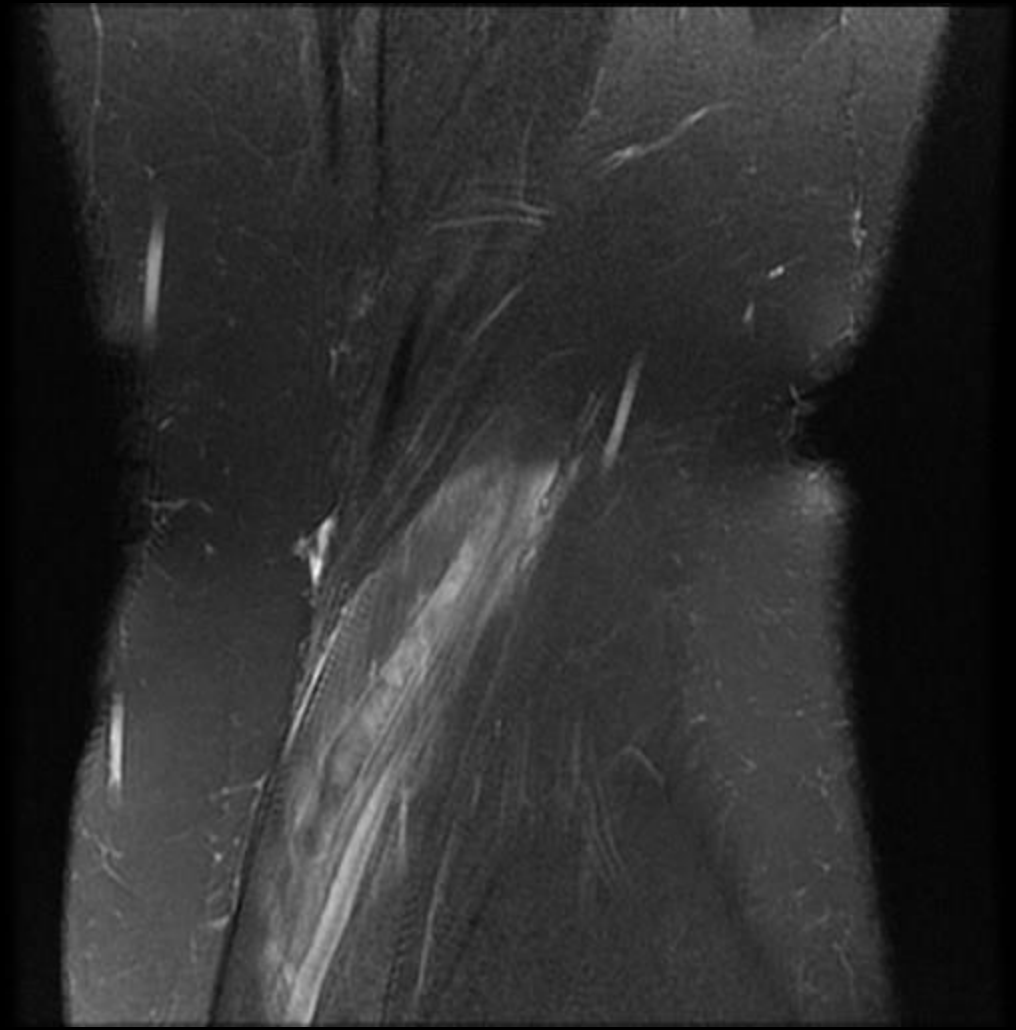












Thrombosis of the gastrocnemius vein

Can be associated minor trauma to lower extremity

Potential for proximal migration of thrombosis with resultant pulmonary emboli

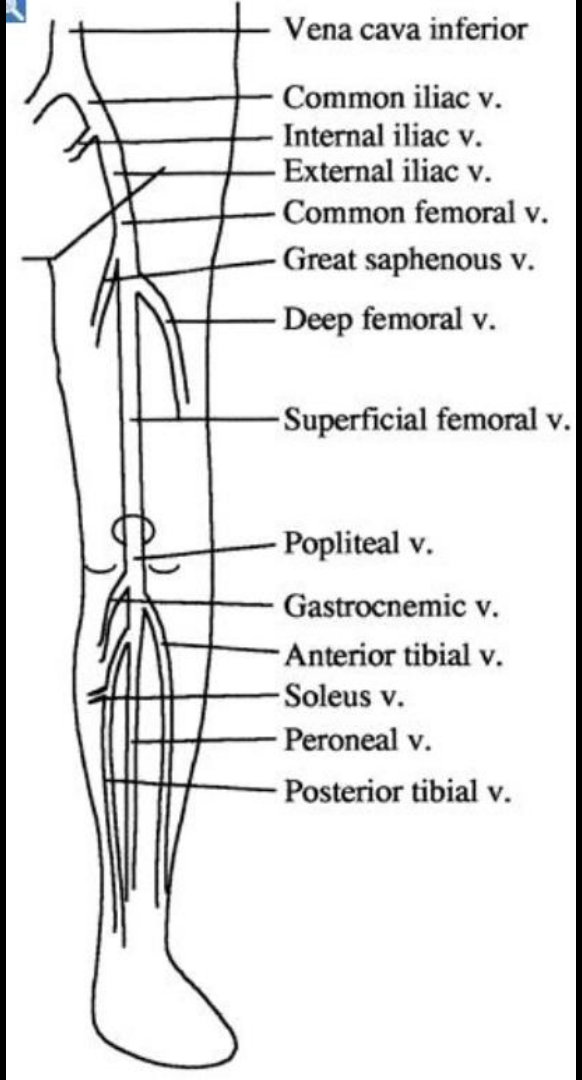
Late term complications of venous insufficiency

Deep veins

Located underneath the deep fascia of the lower limb, accompanying the major arteries

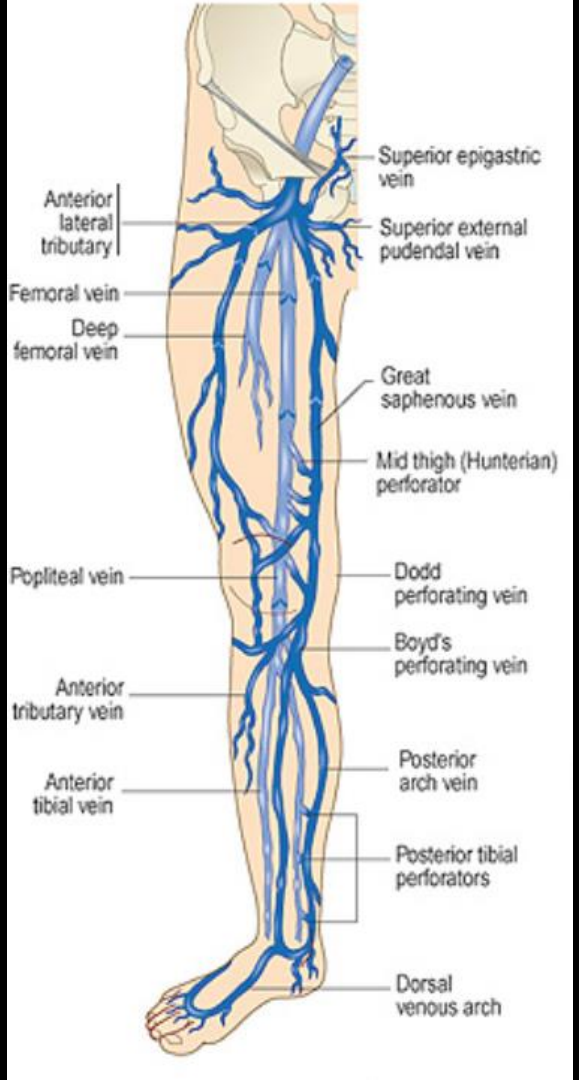
# of gastrocnemius veins variable.. 2-12 for each muscle head

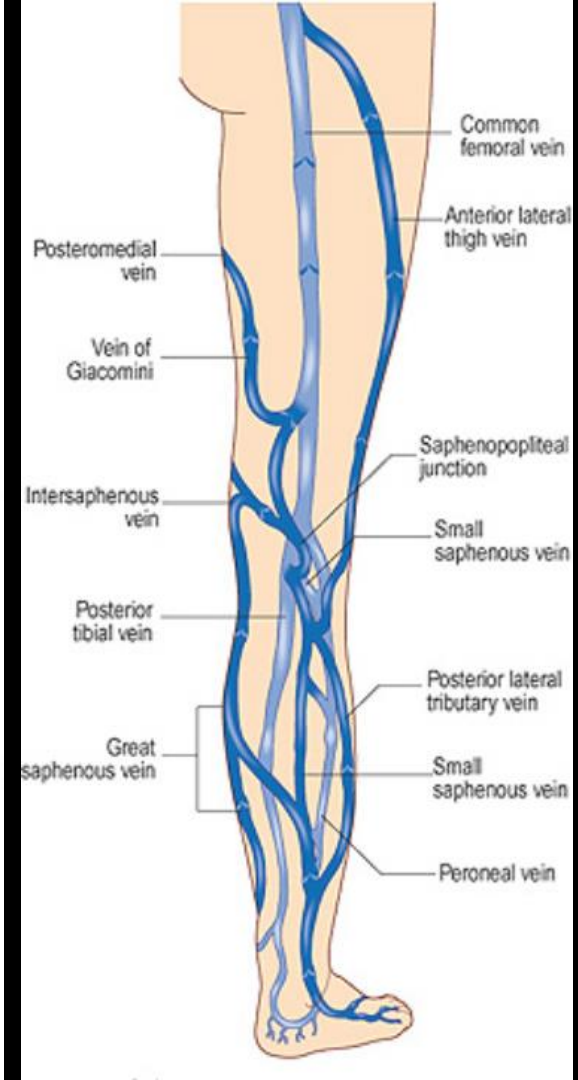
# of soleus veins.. 7-38

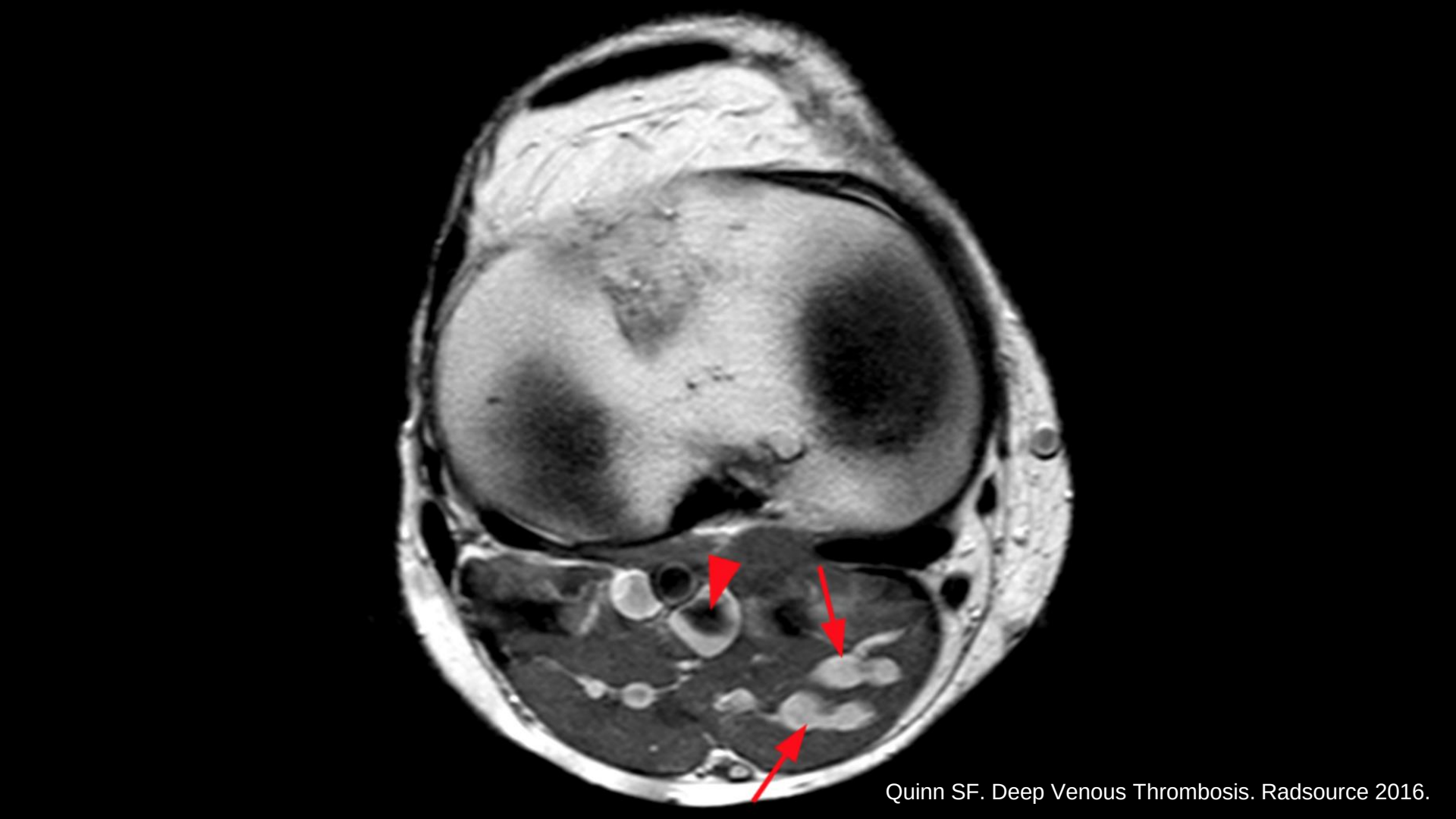


Superficial veins

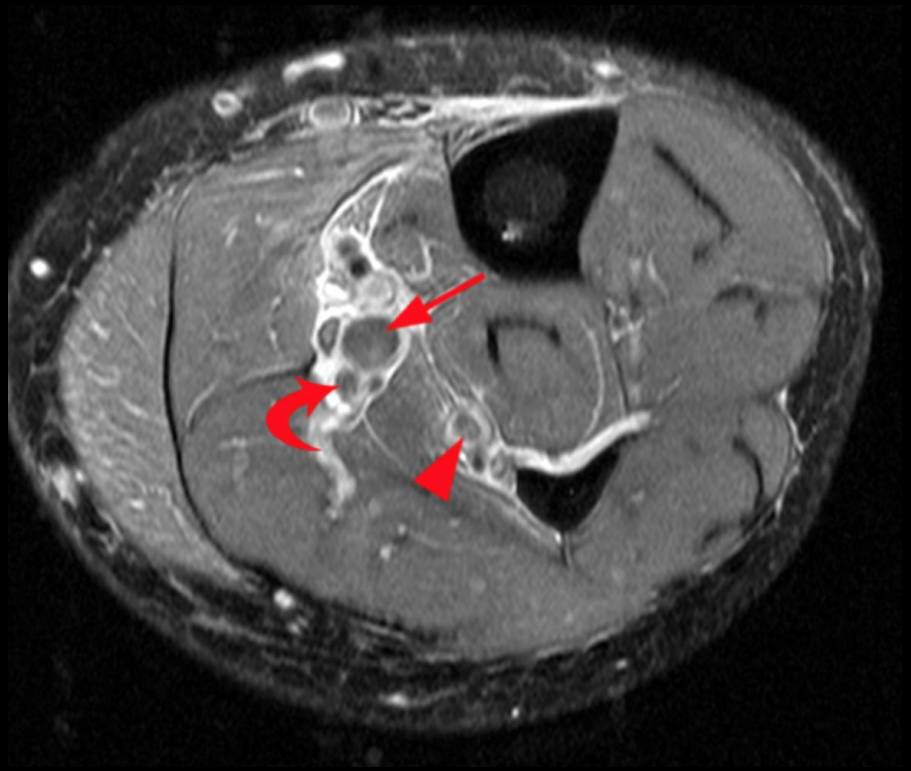
Found in SQ tissue, eventually drain into deep veins

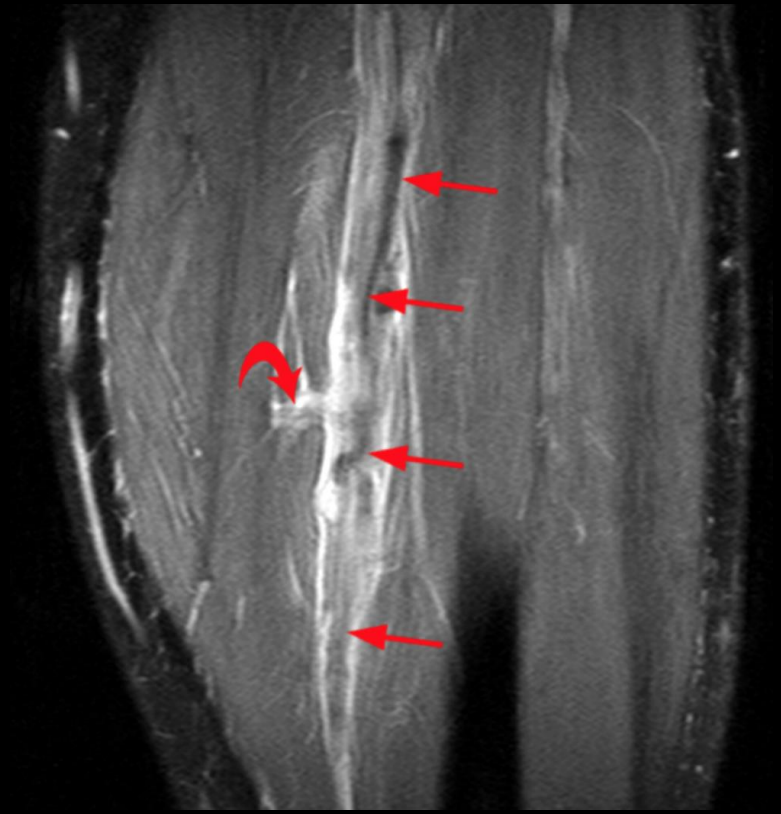






Quinn SF. Deep Venous Thrombosis. Radsource 2016.



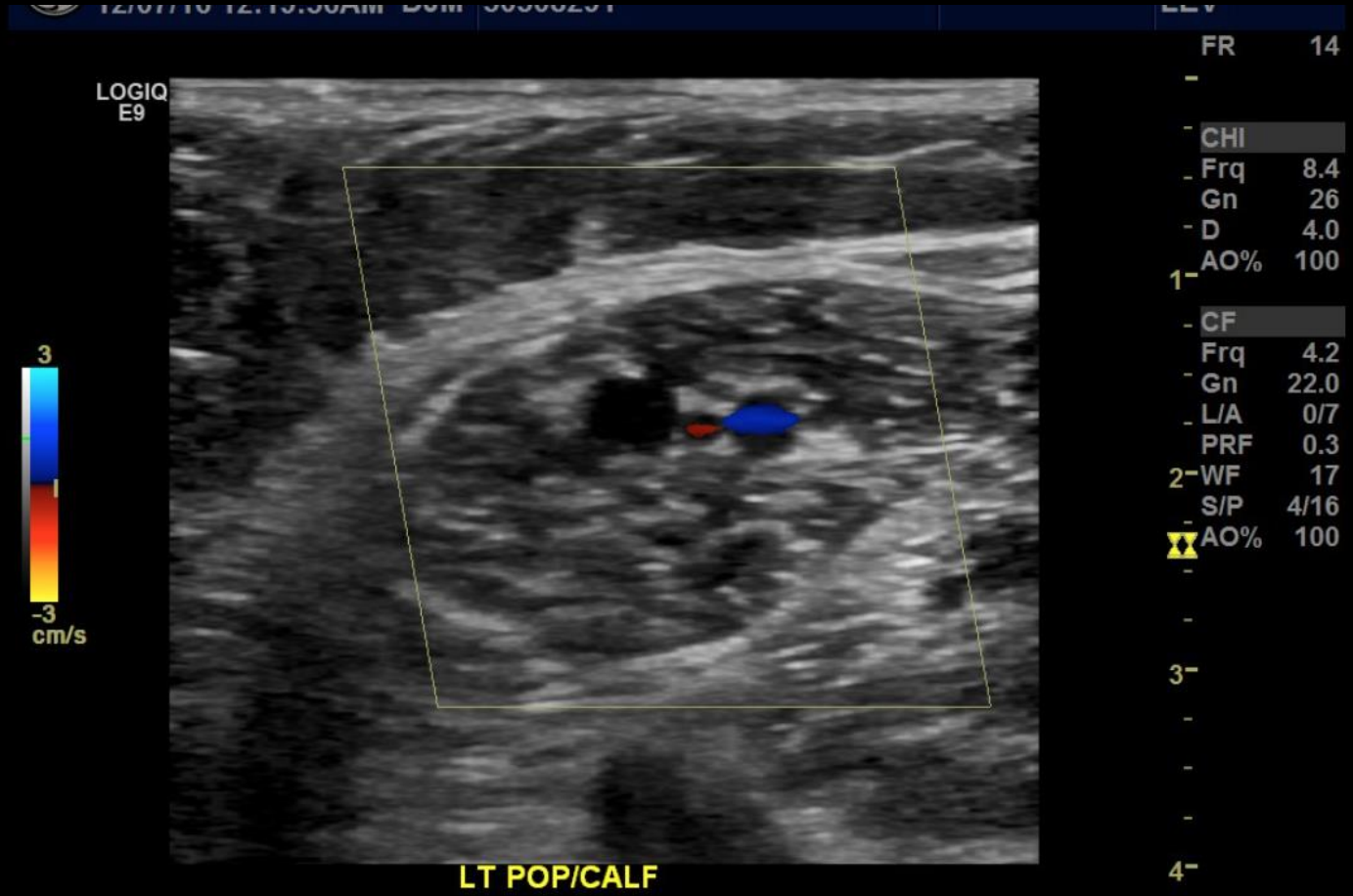


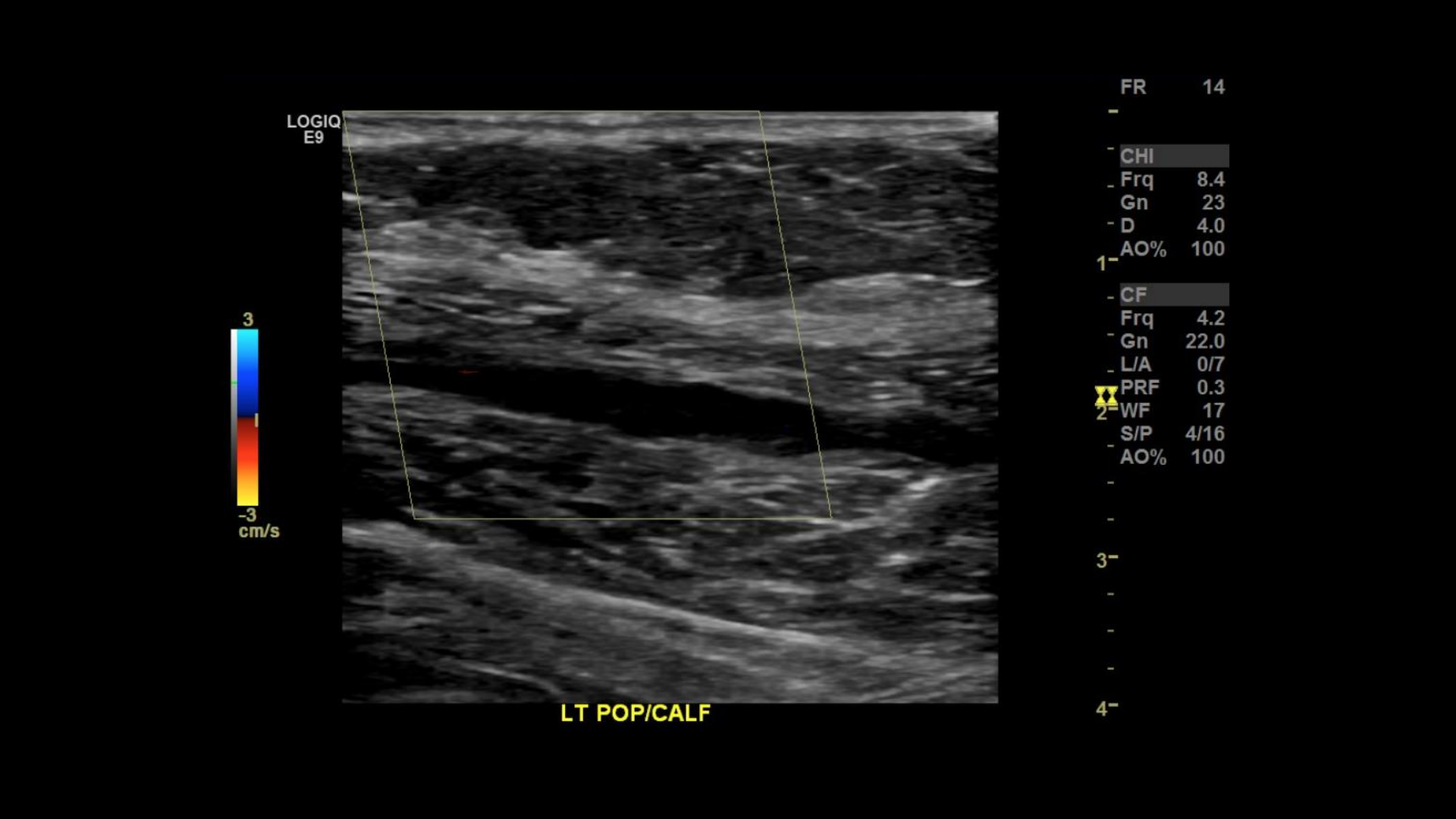
Quinn SF. Deep Venous Thrombosis. Radsource 2016.

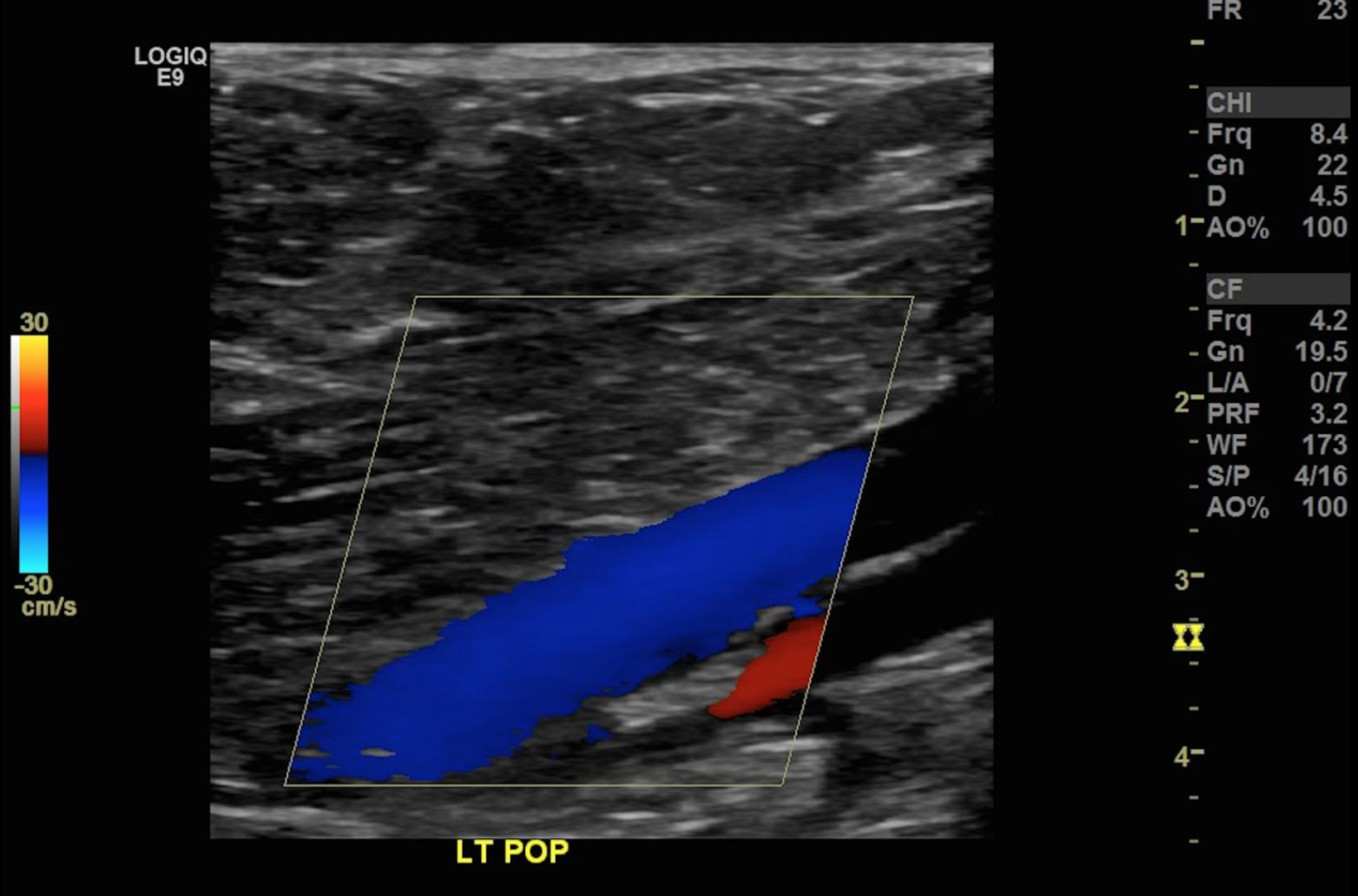
Risk factors for calf vein DVT

- Malignancy
- Immobility
- Previous DVT
- Trauma
- Postoperative status

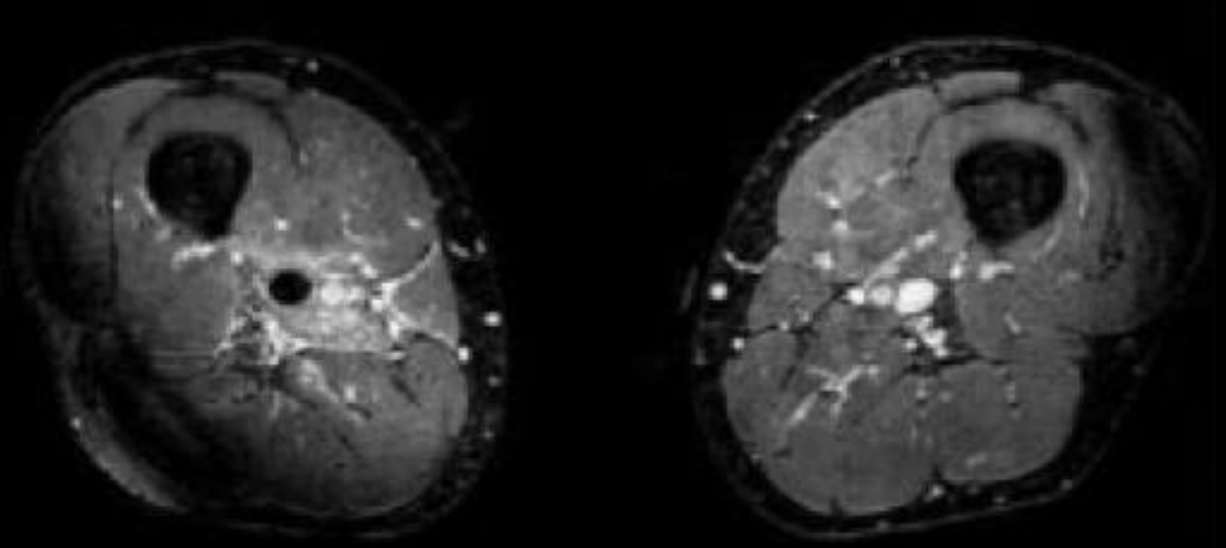
Homans’ sign- increased resistance, involuntary flexion of knee, or pain in calf on forced dorsiflexion of the foot


LOGIQ
E9
3
-3
cm/s
LT POP/CALF
FR 14
CHI
Frq 8.4
Gn 26
D 4.0
AO% 100
CF
Frq 4.2
Gn 22.0
L/A 0/7
PRF 0.3
WF 17
S/P 4/16
AO% 100
1
2
3
4

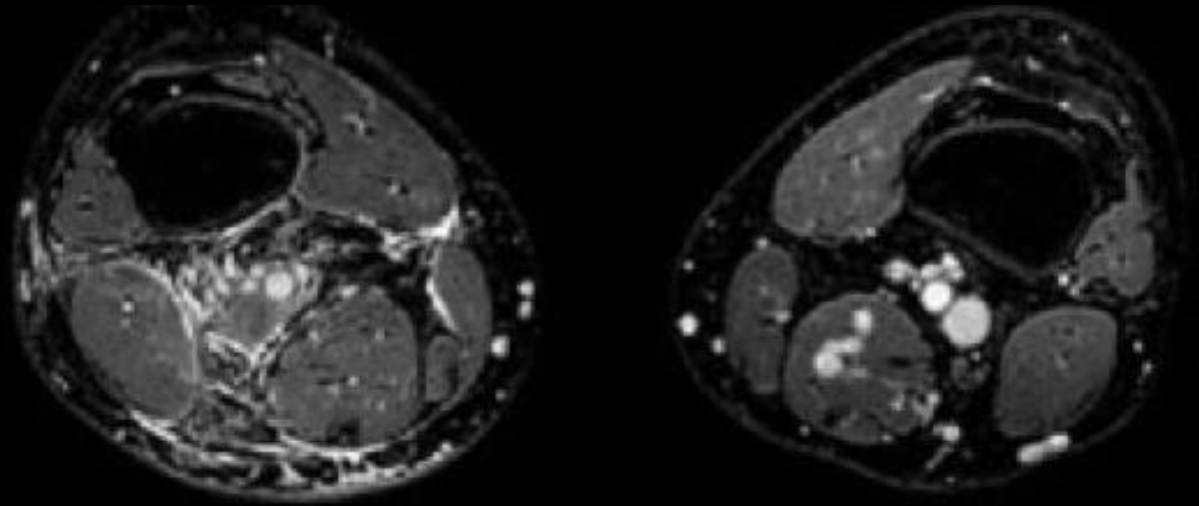

LOGIQ
E9
3
-3
cm/s
FR 14
CHI
Frq 8.4
Gn 23
D 4.0
AO% 100
CF
Frq 4.2
Gn 22.0
L/A 0/7
PRF 0.3
WF 17
S/P 4/16
AO% 100
1
2
3
4
LT POP/CALF


LOGIQ
E9
30
-30
cm/s
FR 23
CHI
Frq 8.4
Gn 22
D 4.5
AO% 100
CF
Frq 4.2
Gn 19.5
L/A 0/7
PRF 3.2
WF 173
S/P 4/16
AO% 100
LT POP

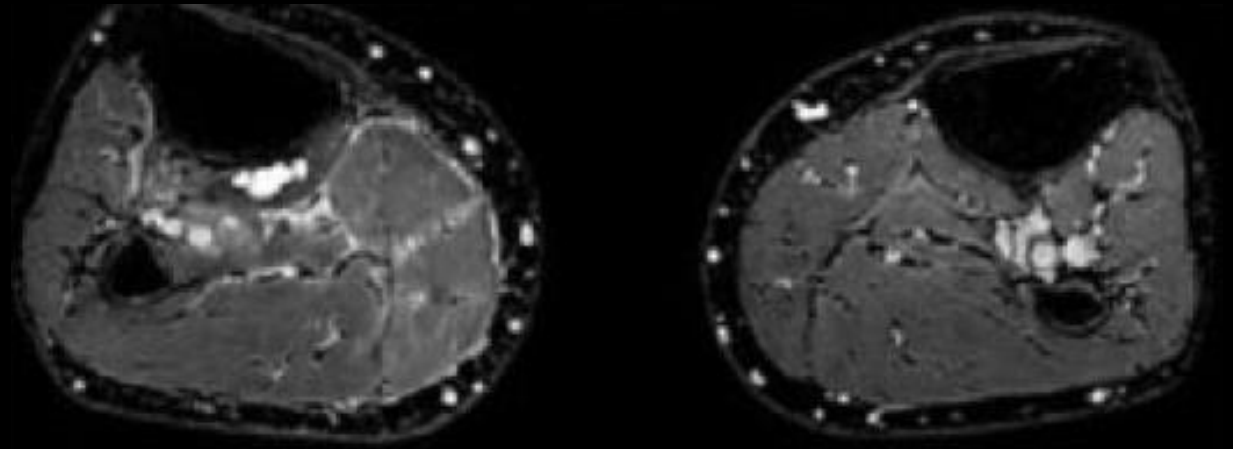
MRI venography



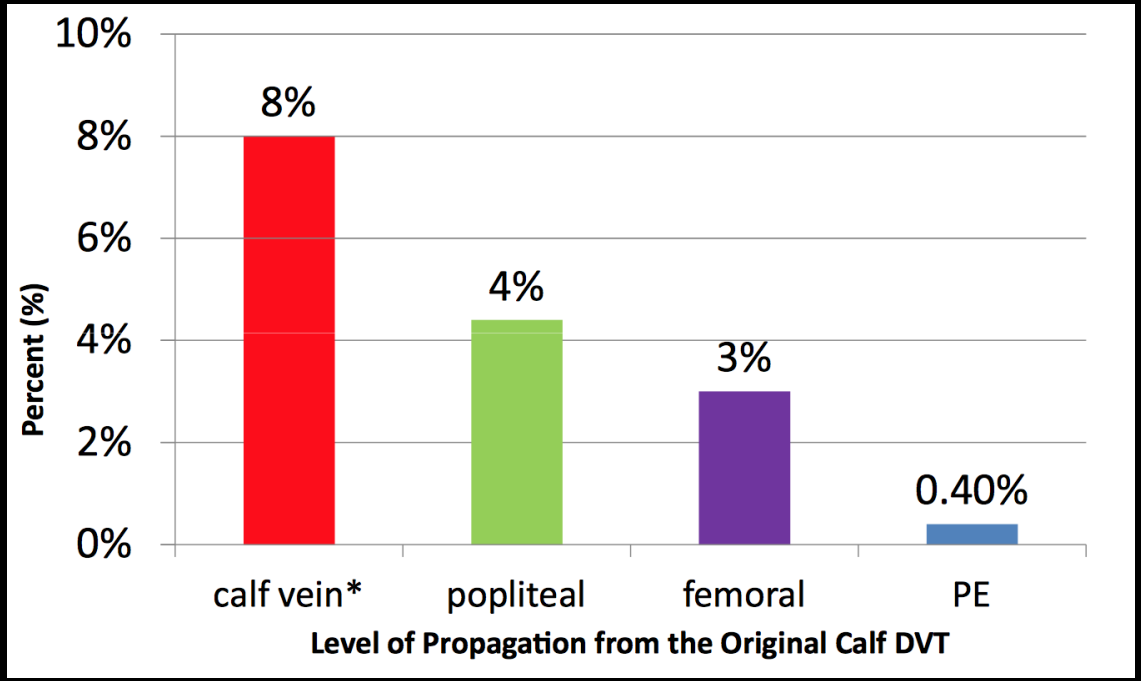
Enden T, et al. Visualization of Deep Veins and Detection of DVT with b-TFE and CE-FFE using a BPA. Journal of MRI 2010.



Enden T, et al. Visualization of Deep Veins and Detection of DVT with b-TFE and CE-FFE using a BPA. Journal of MRI 2010.



Enden T, et al. Visualization of Deep Veins and Detection of DVT with b-TFE and CE-FFE using a BPA. Journal of MRI 2010.



Cambria RP, et al. The controversy of managing calf vein thrombosis. J Vasc Surg 2012; 55(2):550-61.

Treatment

Don’t treat asymptomatic patients with isolated calf DVT and instead recommend serial duplex exams to evaluate for proximal thrombus extension

Patients who underwent orthopedic procedures- do treat w anticoagulation

Review article- either anticoagulate for an undetermined duration or observe w/elastic support and surveillance imaging

References

Quinn SF. Deep Venous Thrombosis. Radsource 2016.

Enden T, et al. Visualization of Deep Veins and Detection of DVT with b-TFE and CE-FFE using a Blood Pool Agent. Journal of MRI 2010. 31:416-424.

Cambria RP, et al. The controversy of managing calf vein thrombosis. J Vasc Surg 2012; 55(2):550-61.