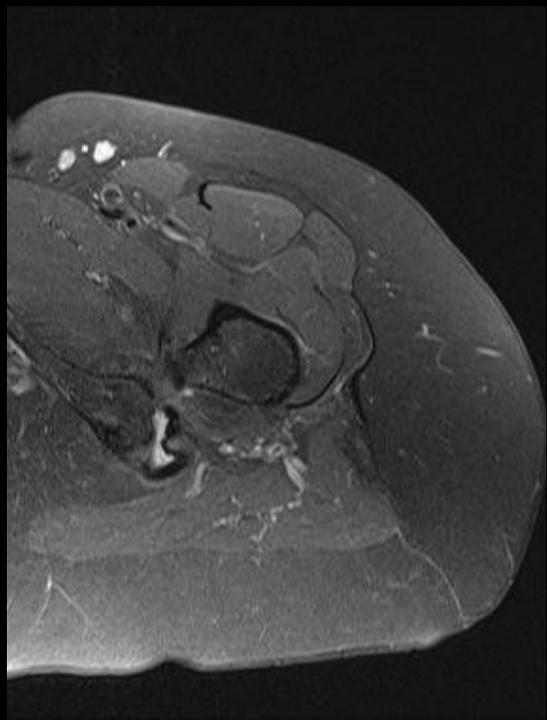
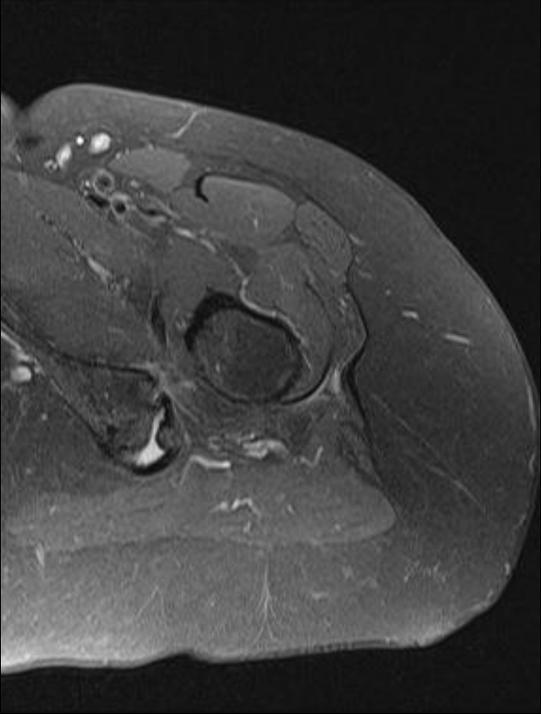


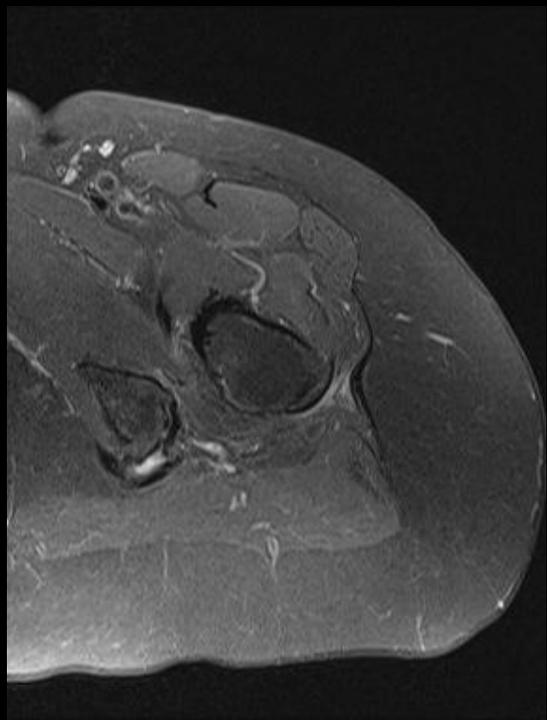
# Persistent hip pain

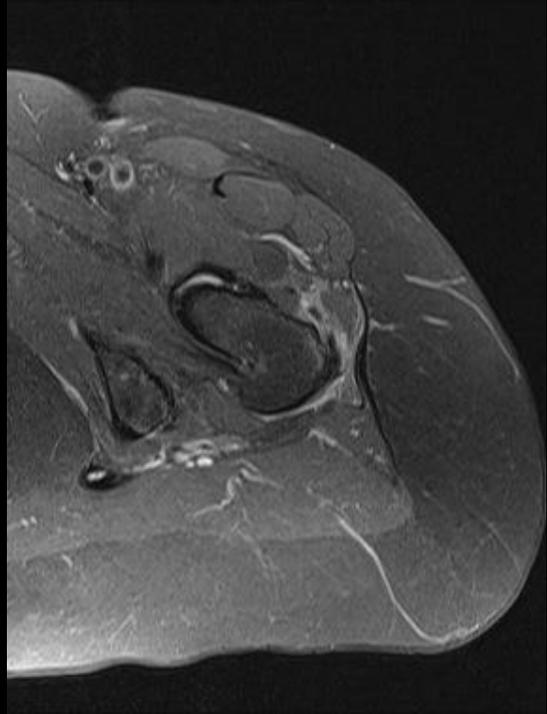
Fell off horse 1 month ago. Rides horse two to three times a week.

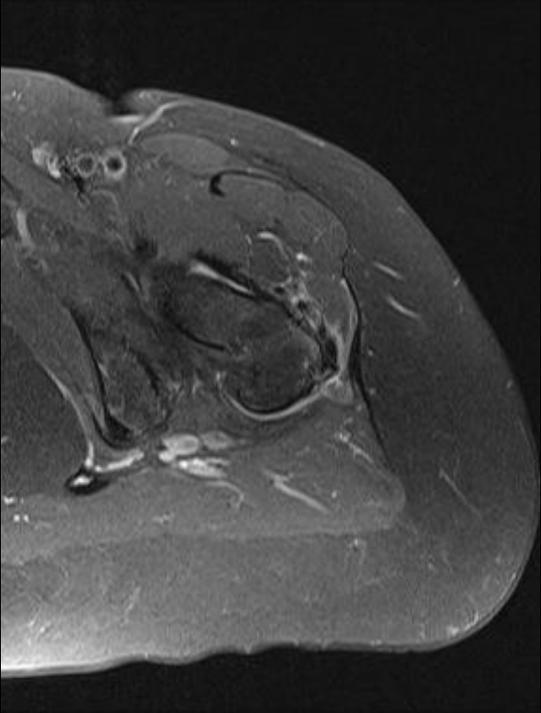
Axial and Sagittal T2 MR Images

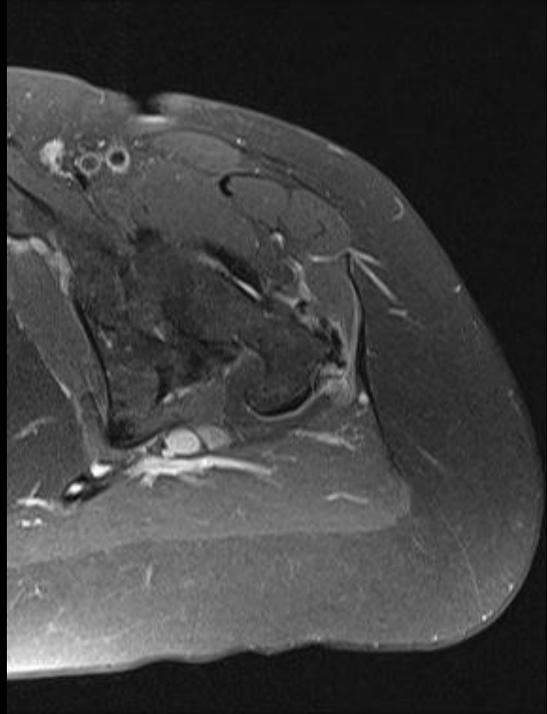


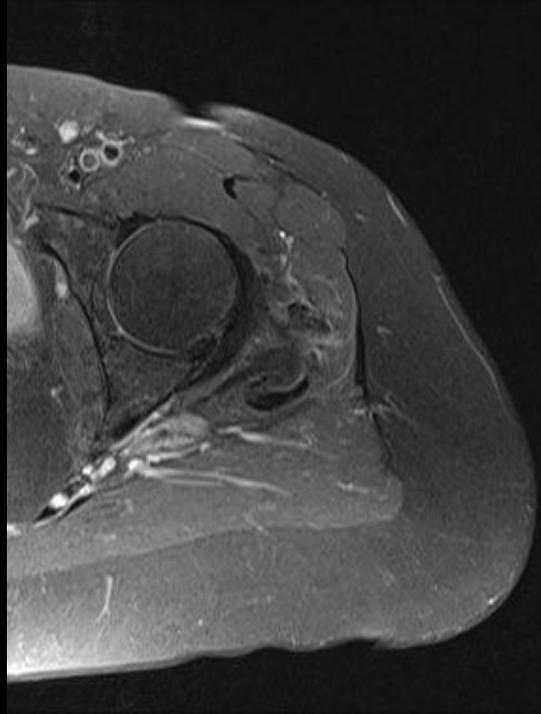


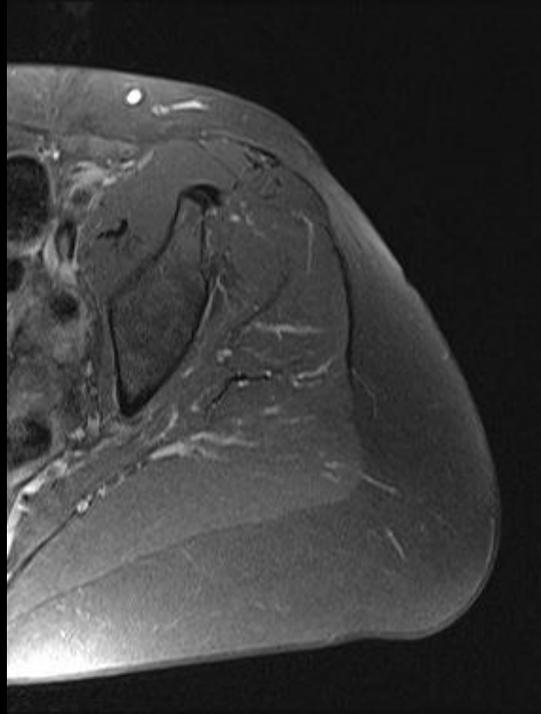


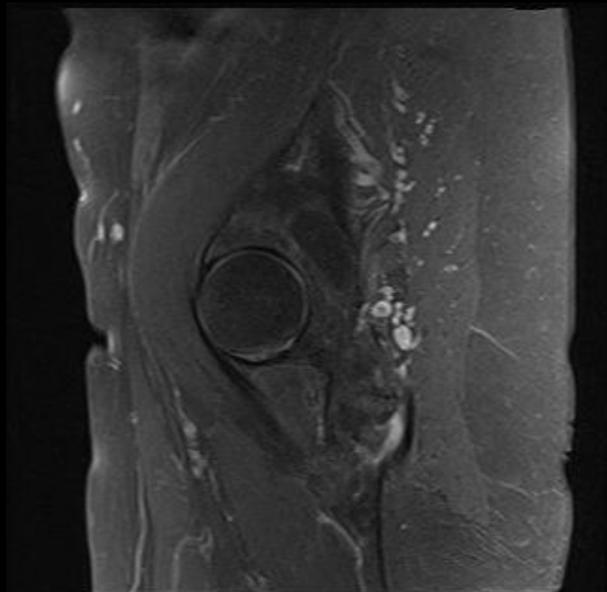


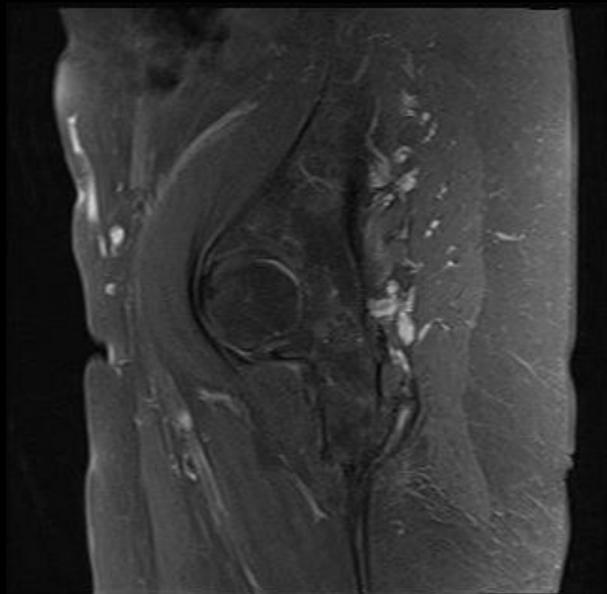


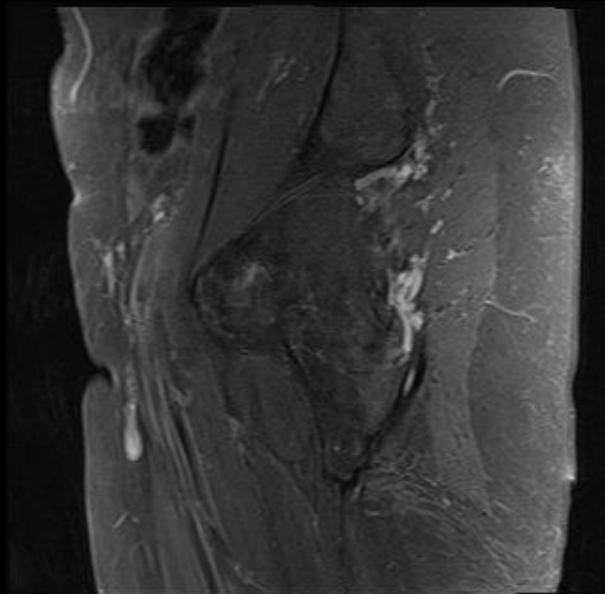


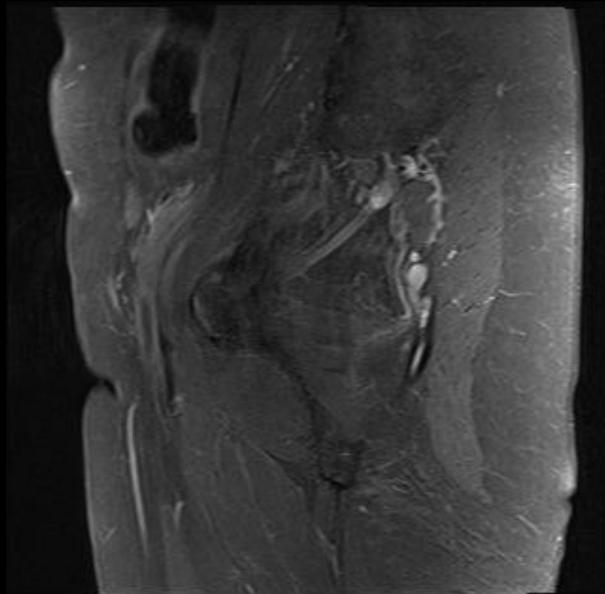


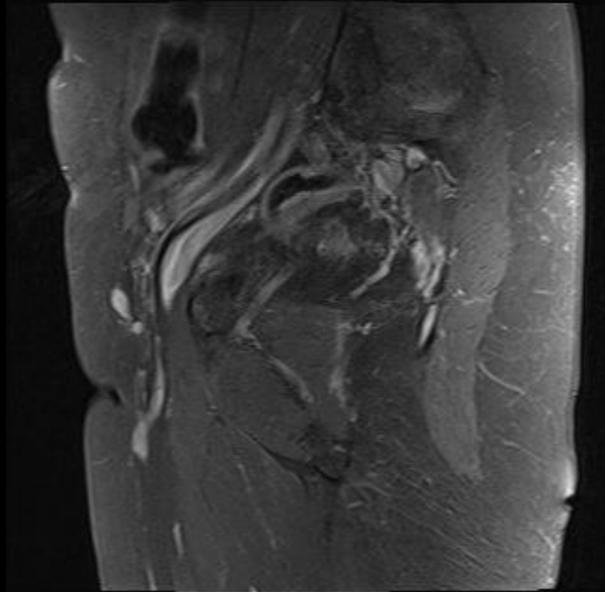


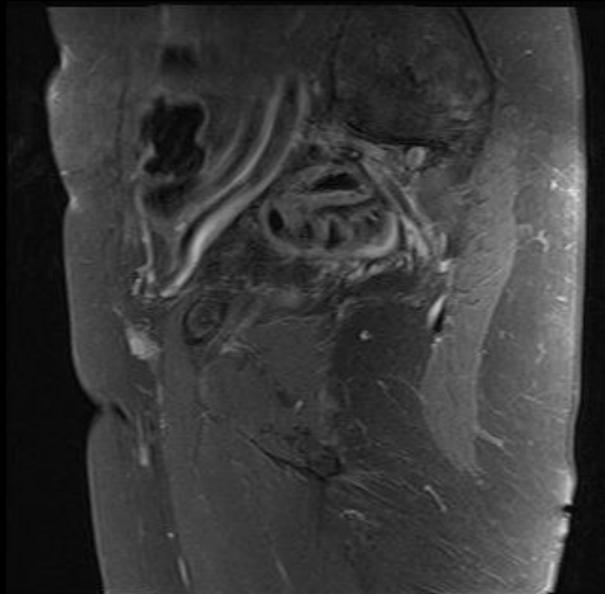




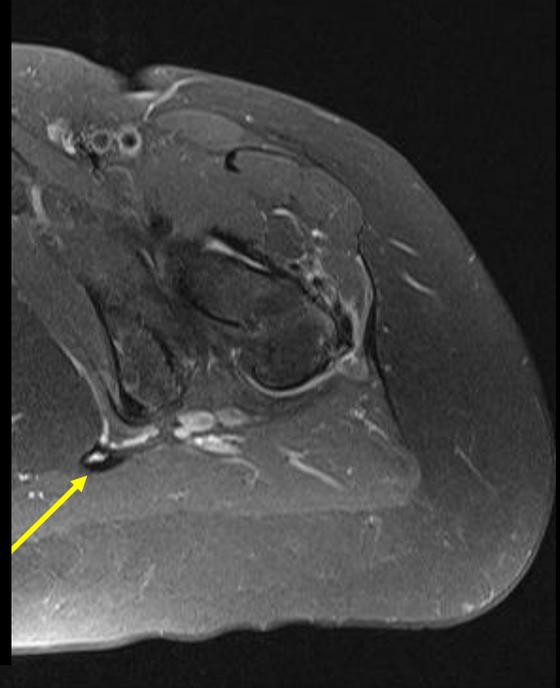
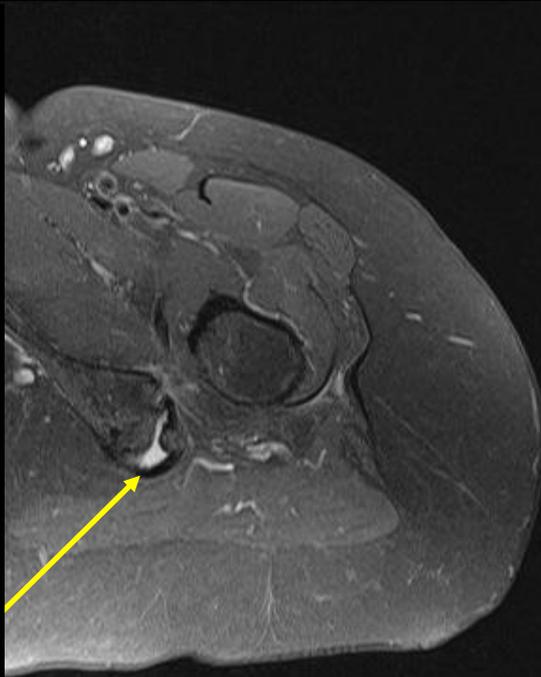




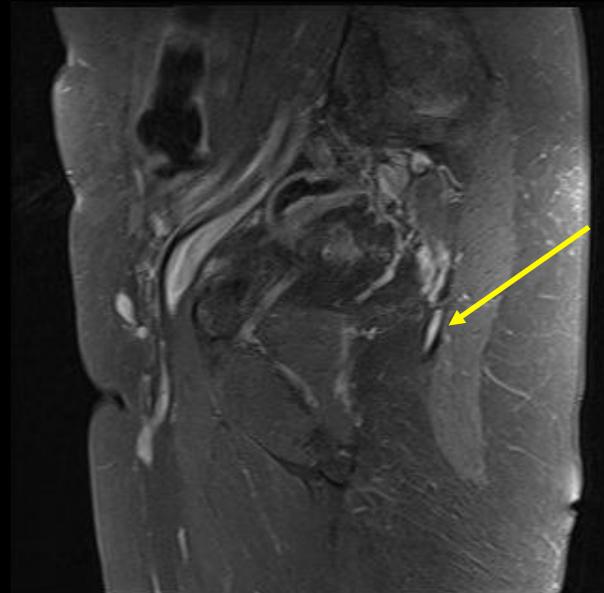




Key Image



There is complex tearing of the hamstring origin complex



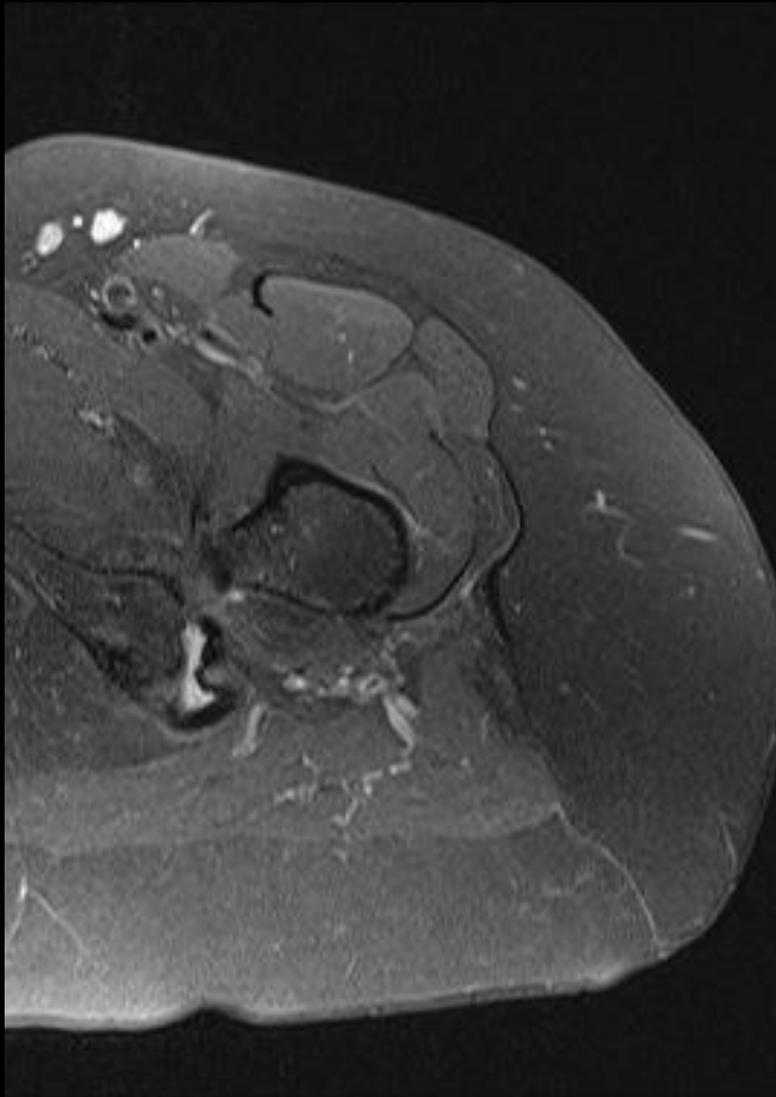
Semi-  
Membranous

Biceps  
Femoris -  
Semi-  
Tendinous

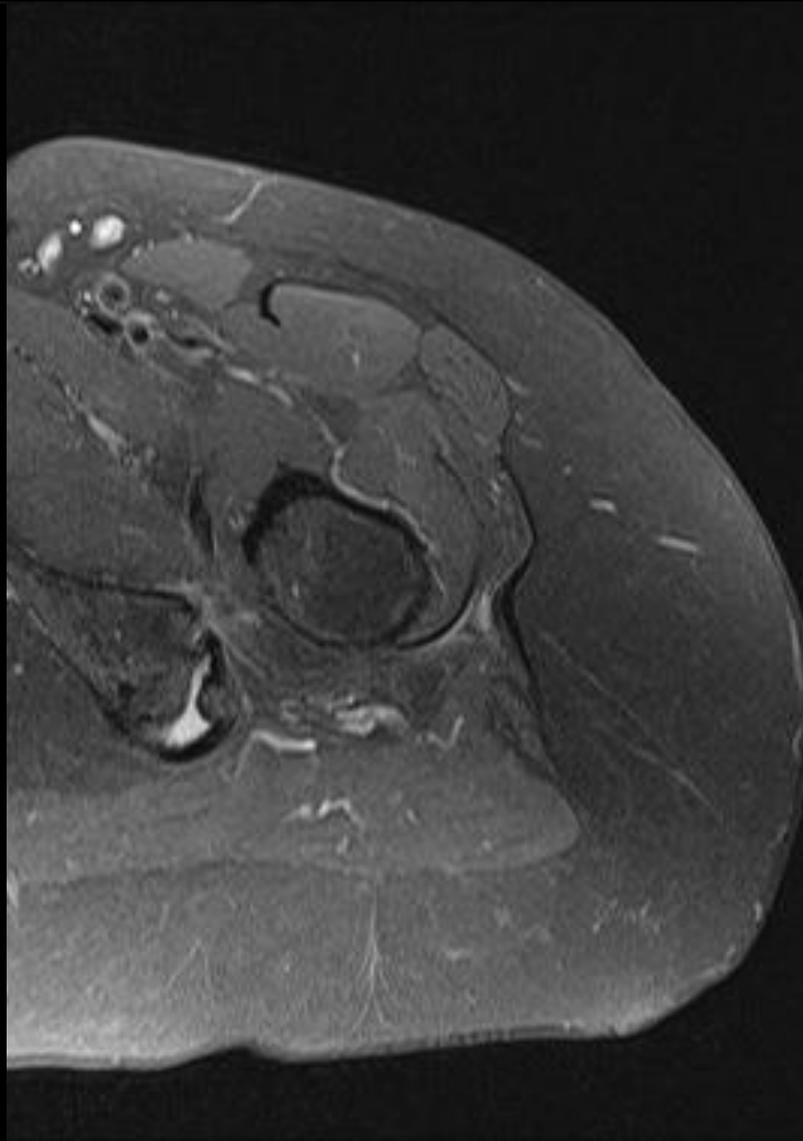


Sacrotuberous

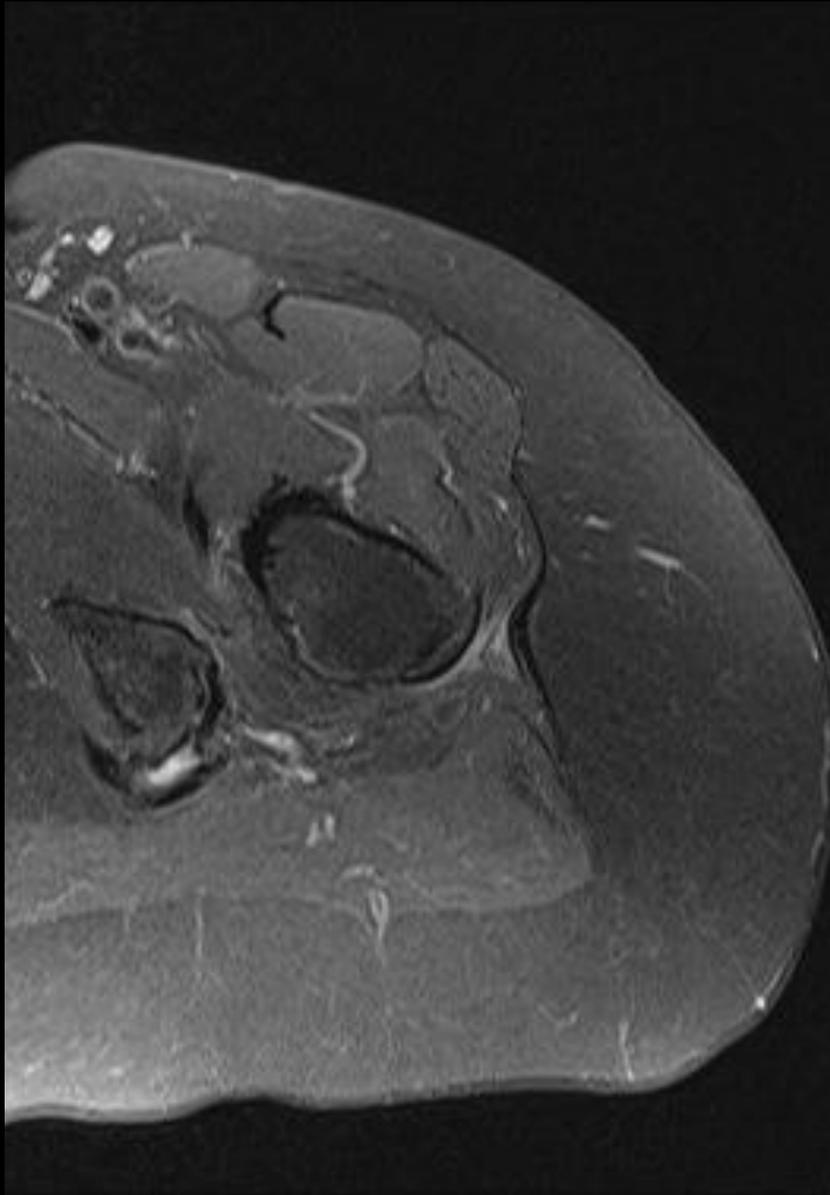
SMALL = Semimembrinosis is Anterolateral



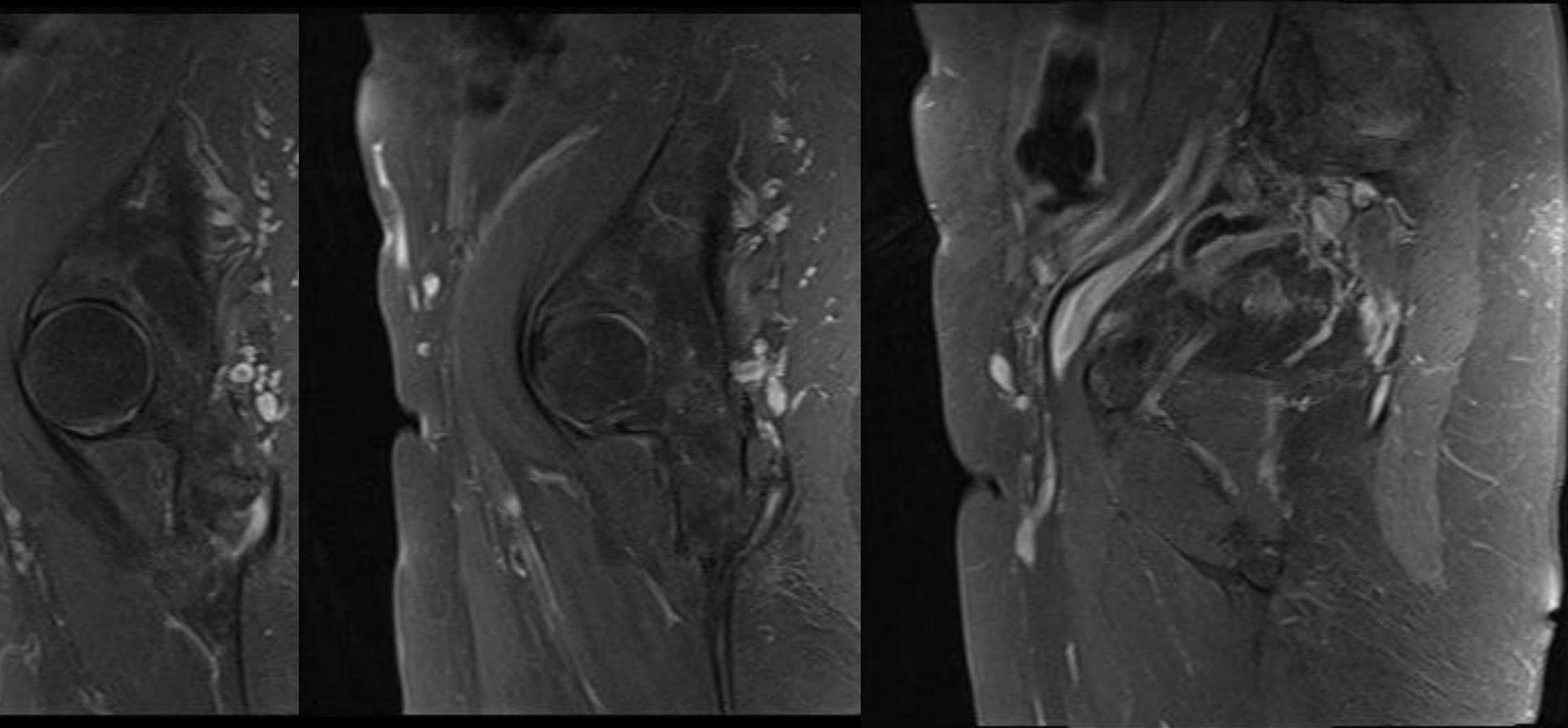
- moderate grade tearing of the semimembranosus tendon near the ischial attachment



- high-grade tearing of the conjoint tendon at the ischium attachment with mild retraction of torn tendon fibers of approximate 1.5 cm

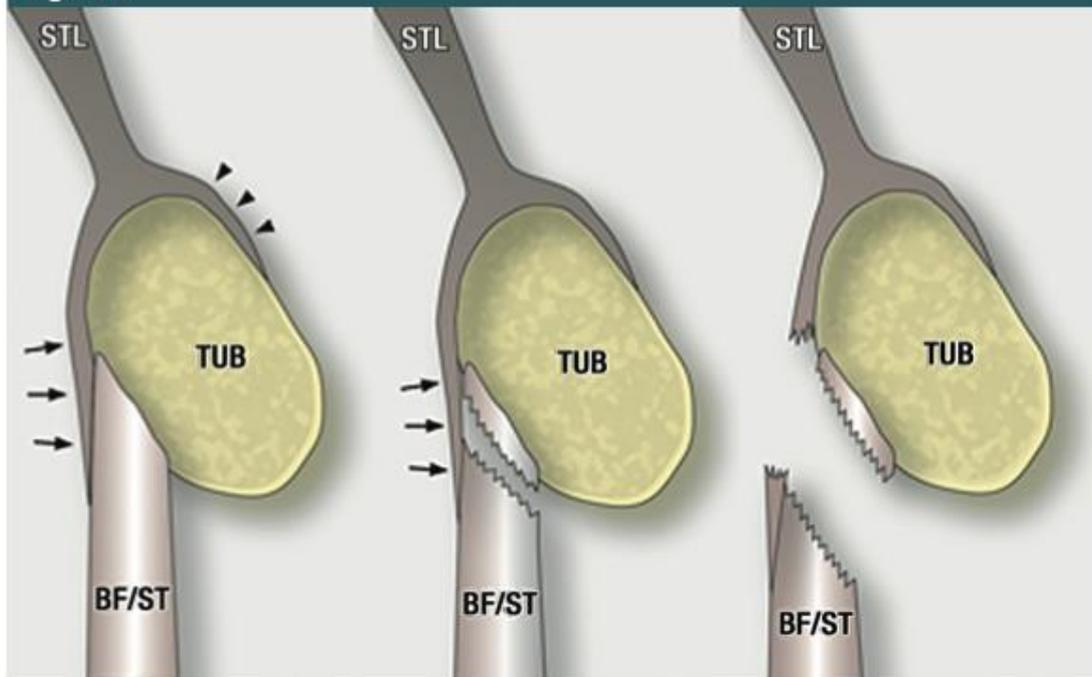


- There is no avulsed bone fragment or significant hematoma.



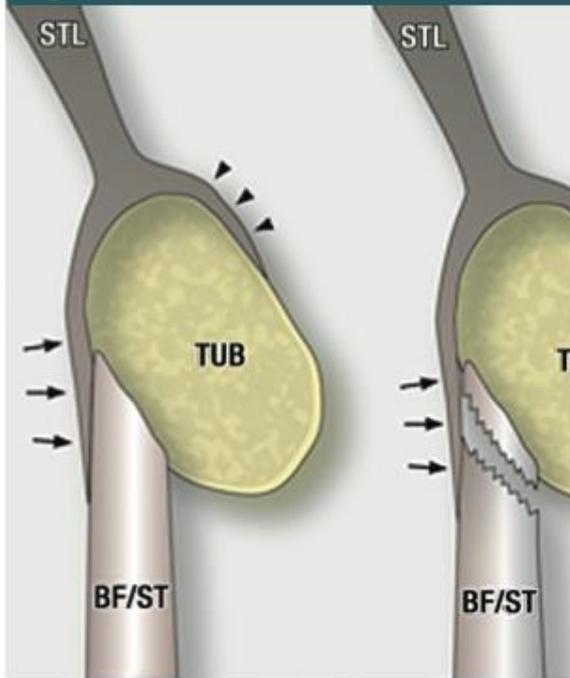
- additional tearing extending into the substance of the sacrotuberous ligament in a delamination type pattern

**Figure 6**

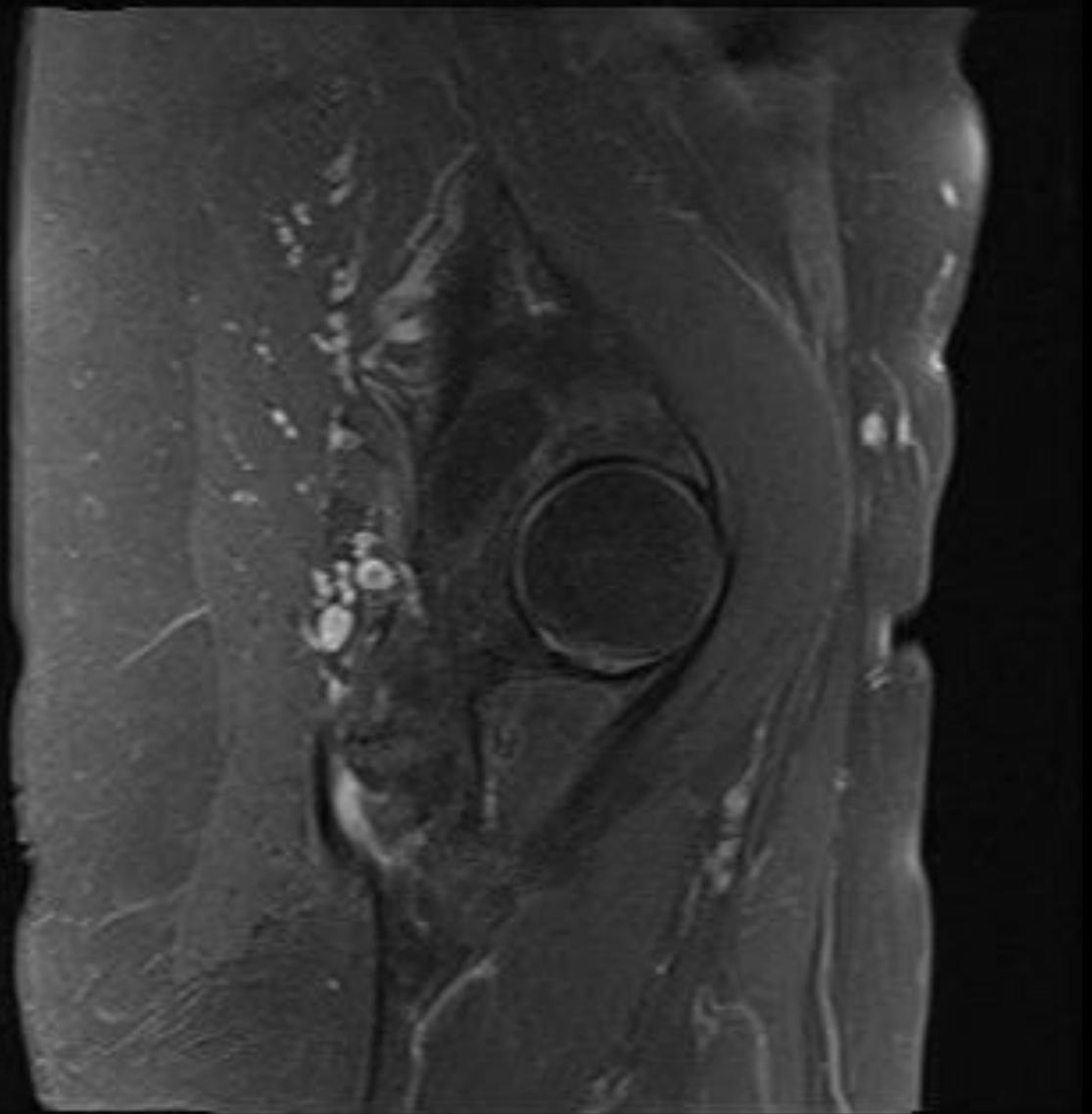


**Figure 6:** Schematic drawing of sagittal sections shows the relationship between STL (arrows) and BF-ST tendon. The osseous attachment site of STL (arrowheads) is also shown. *TUB* = ischial tuberosity. Left: Normal BF-ST tendon. Middle: Detached BF-ST tendon with continuous STL. Right: Detached BF-ST tendon with discontinuous STL. There is less BF-ST tendon retraction with STL continuity and more retraction with STL discontinuity.

**Figure 6**



**Figure 6:** Schematic drawing of sagittal sections show tendon. The osseous attachment site of STL (arrowheads Normal BF-ST tendon. Middle: Detached BF-ST tendon with discontinuous STL. There is less BF-ST tendon retraction behind STL discontinuity.



**Figure 4**



**Figure 4:** (a–c) Axial proton-density-weighted MR images (from cranial to caudal) show discontinuous STL in a 55-year-old patient with BF-ST tendon detachment and partial tear of SM tendon from ischial tuberosity. BF-ST tendon retraction was 22 mm. SM tendon (wavy arrow) is visible at all three levels. STL (straight arrow) is present at the highest level. BF-ST tendon (curved arrow) is present at the lowest level. At the level of the ischium (\*) and STL attachment site (angled arrow), STL and BF-ST tendon are missing from their expected locations.

- STL discontinuity with the BF-ST tendon is significantly associated with rupture of the BF-ST tendon ( $P < .0001$ ).
- The STL can remain continuous with the BF-ST tendon despite high-grade partial tear or rupture of the BF-ST tendon from the ischial tuberosity.
- When the BF-ST tendon is ruptured from the ischium, tendon retraction is significantly less if STL remains continuous with the BF-ST tendon ( $P = .0001$ ).
- The greatest degree of HS retraction occurs when STL detachment from the BF-ST tendon is combined with SM detachment from the ischium ( $P < .01$ ).

## Reference

Sacrotuberous Ligament: Relationship to Normal, Torn, and Retracted Hamstring Tendons on MR Images Guillaume Bierry, F. Joseph Simeone, Joanne P. Borg-Stein, Philippe Clavert, and William E. Palmer. *Radiology* 2014 271:1, 162-171