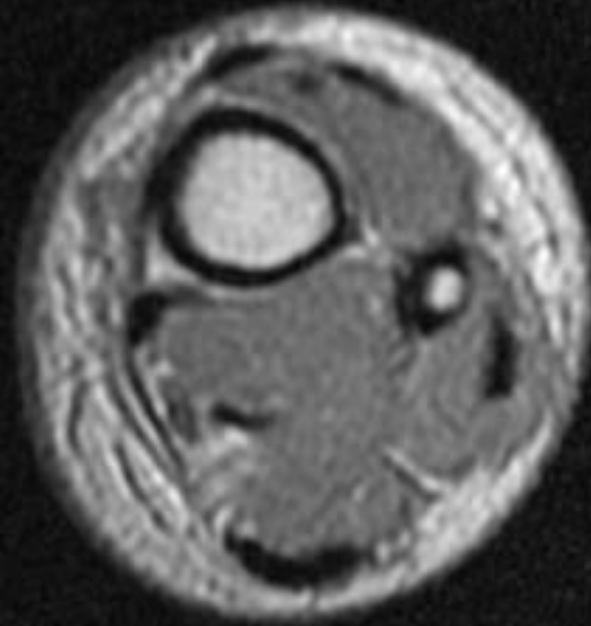


Tennis is Intense



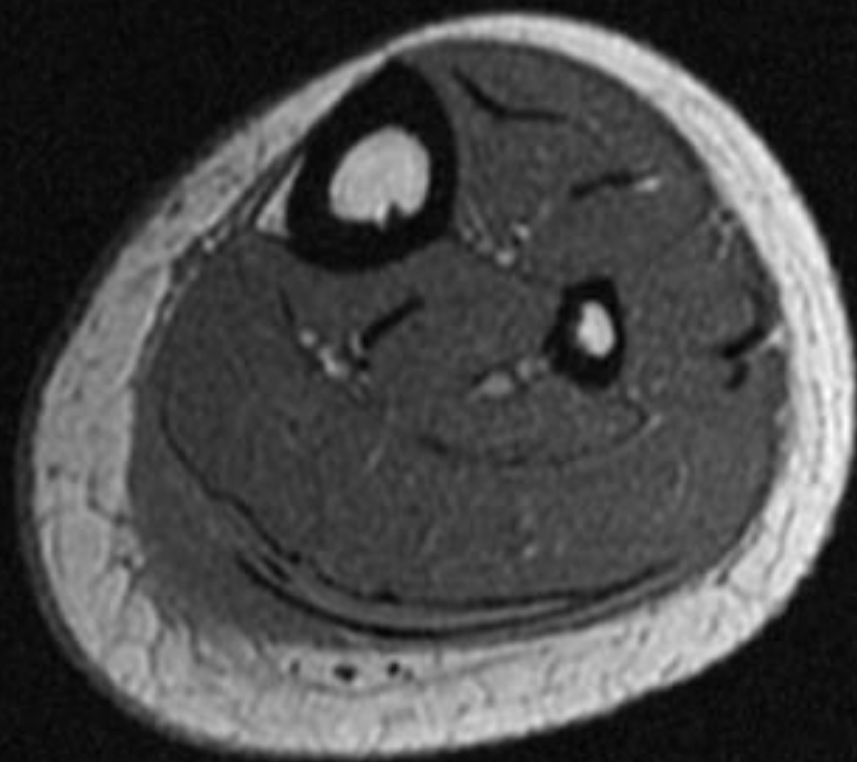
Fellow name

44 yo female patient with acute leg pain after a recent injury

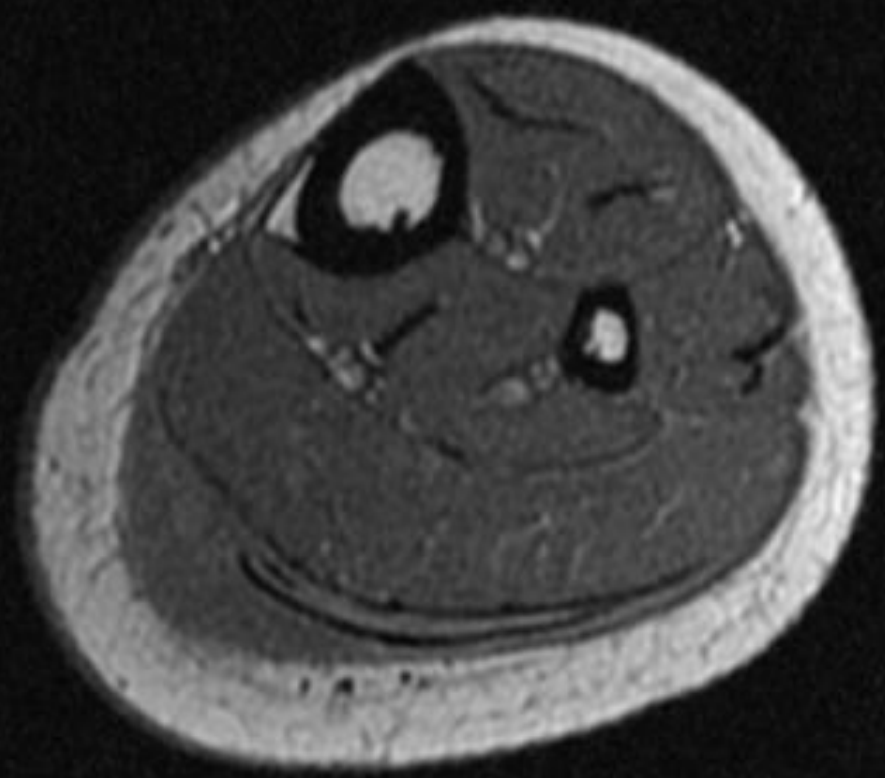


Axial T1

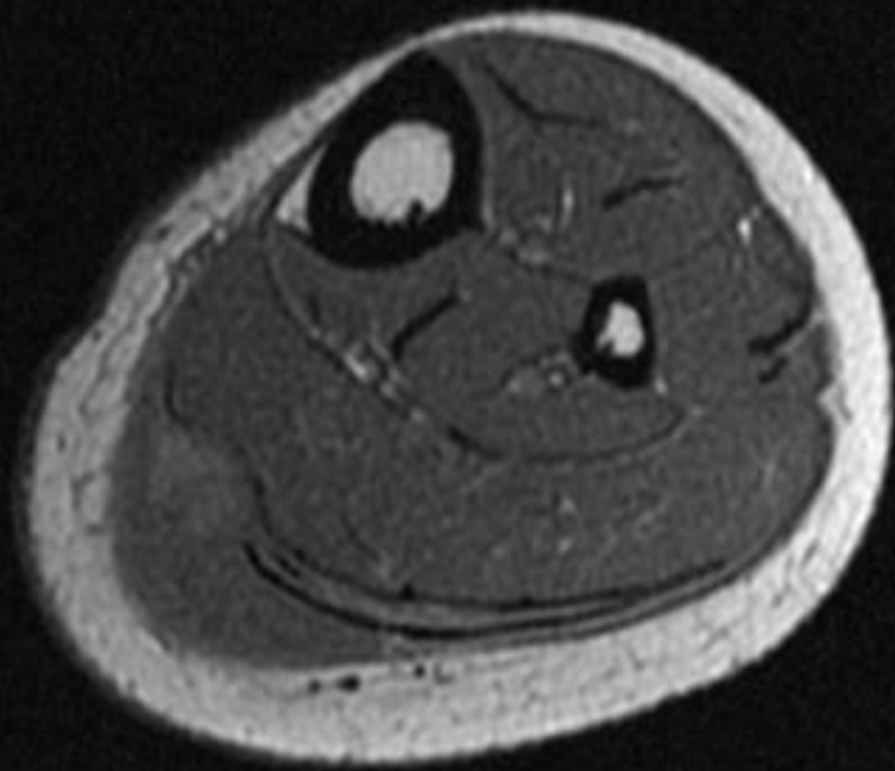
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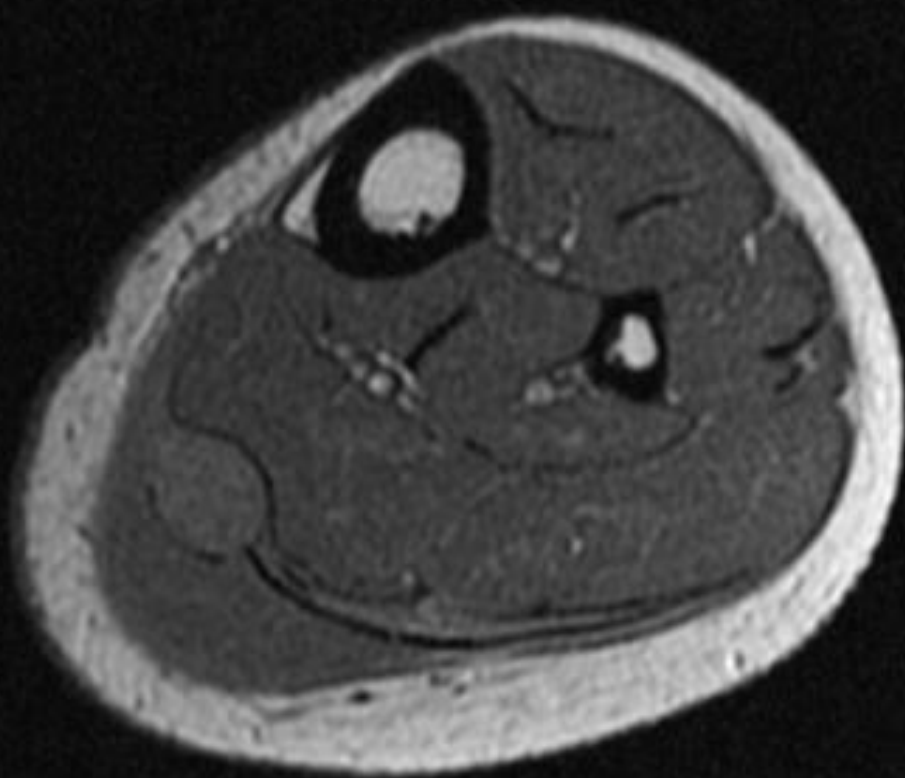
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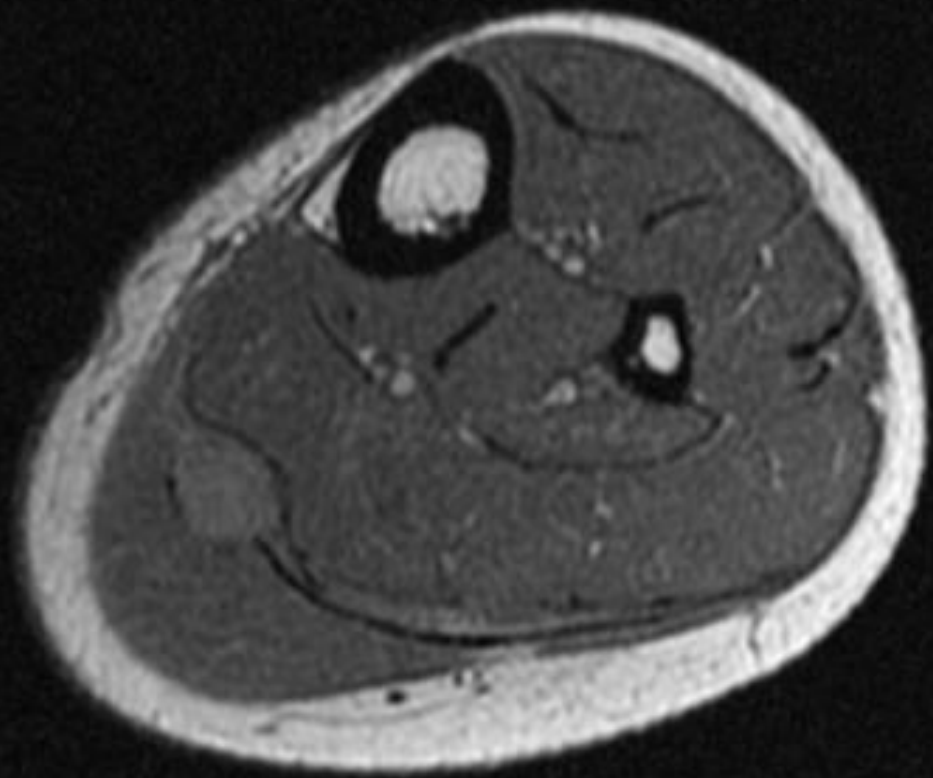
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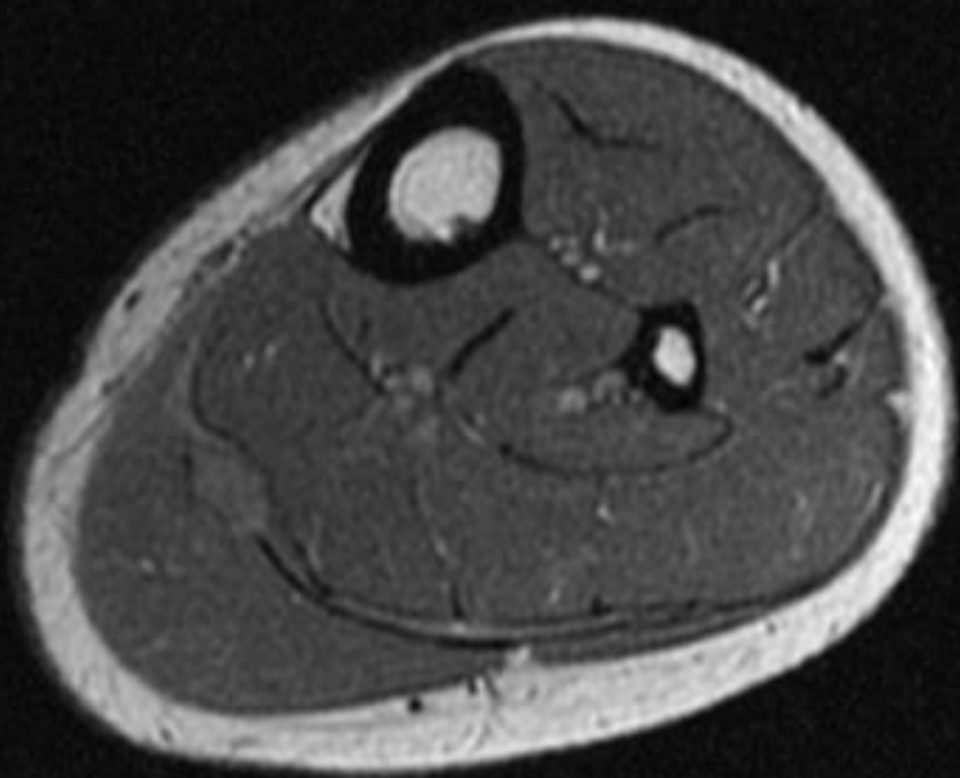
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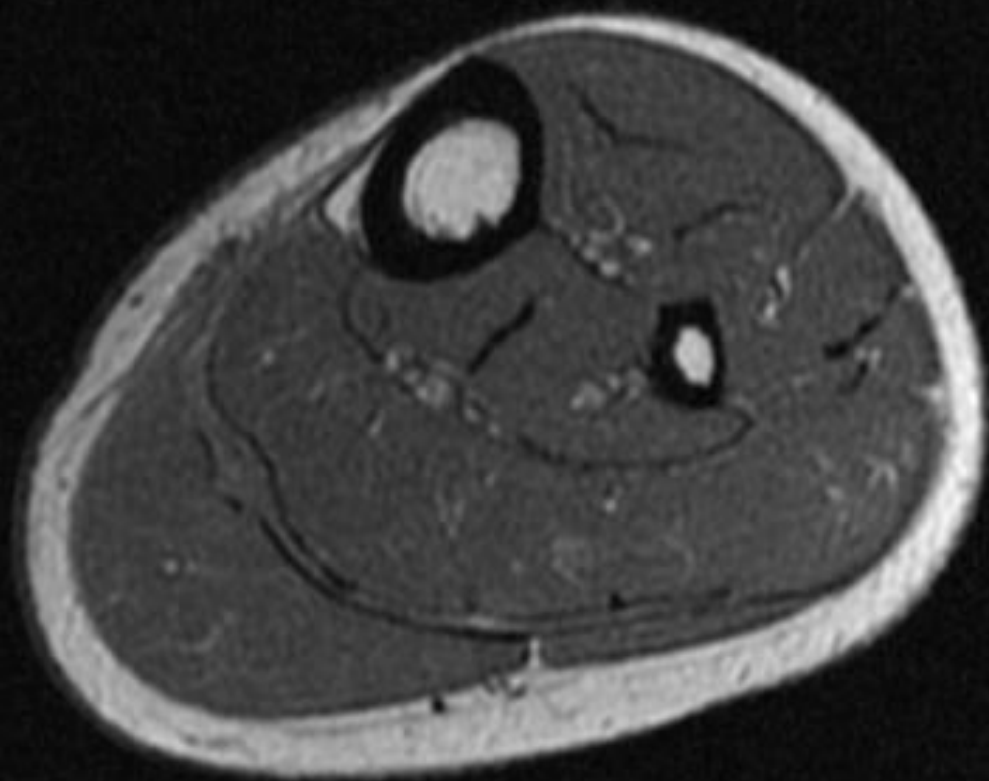
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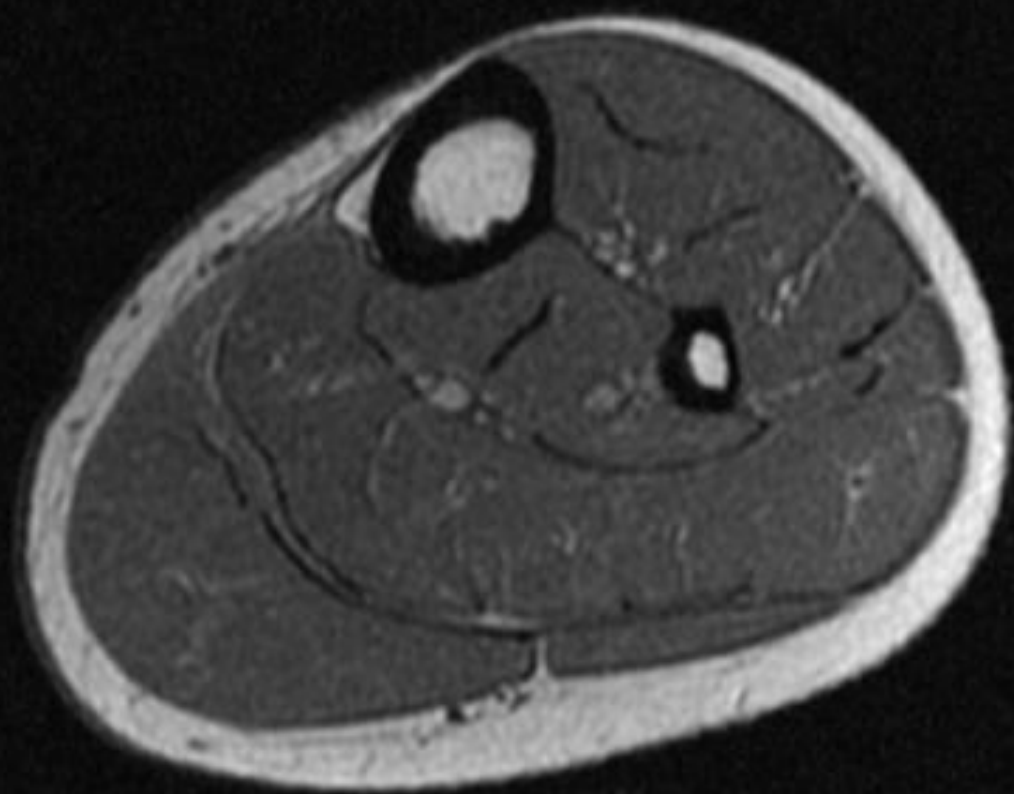
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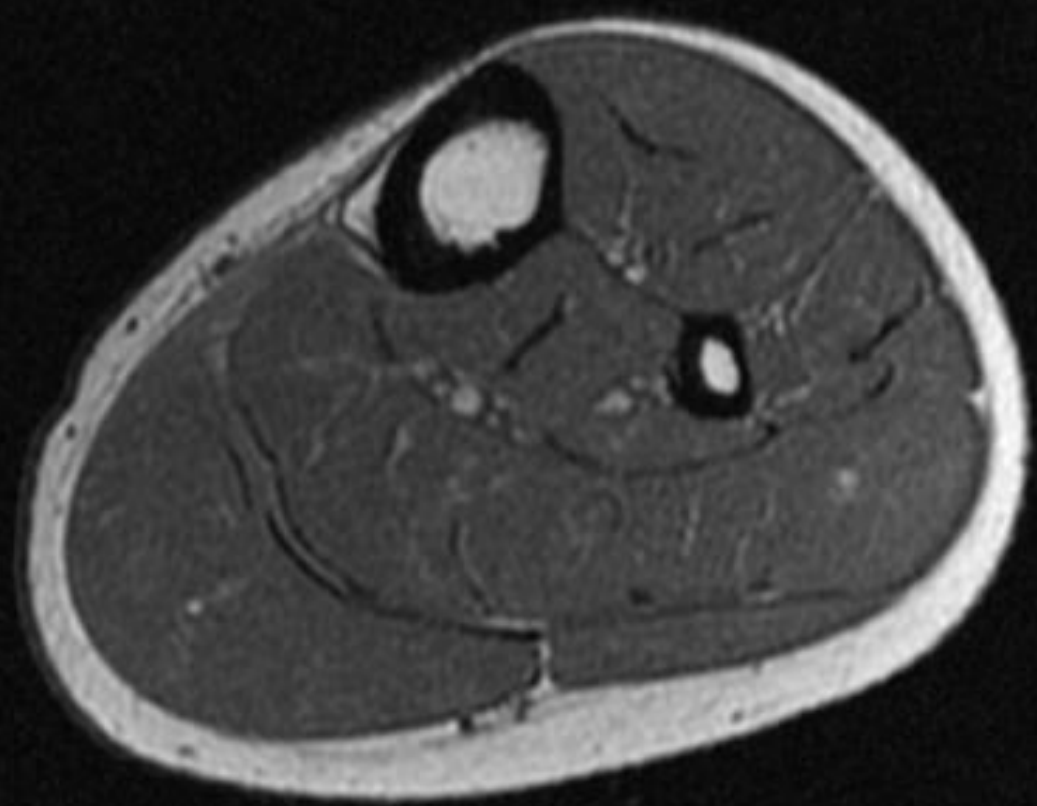
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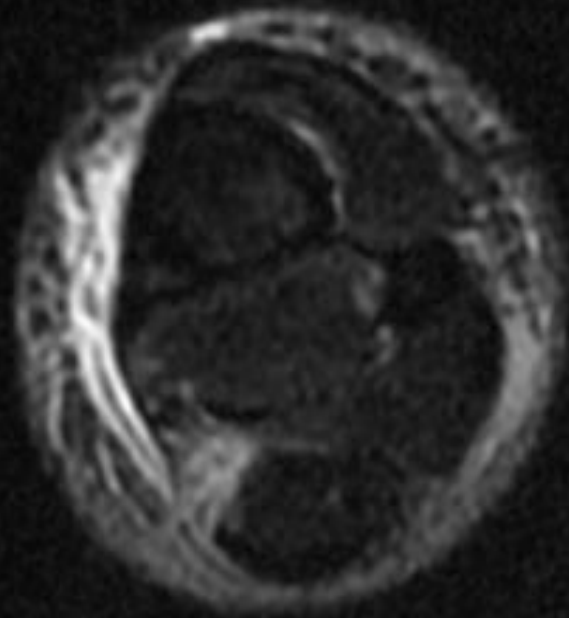
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Lossy Compression 6:1

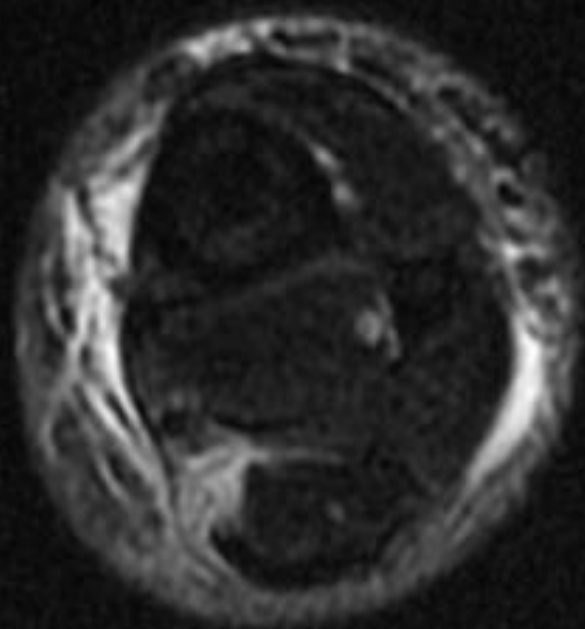


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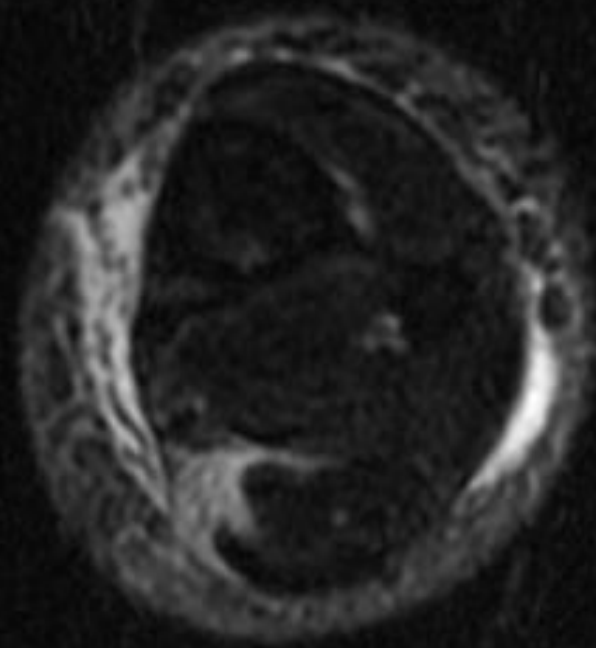


Axial FS fluid sensitive

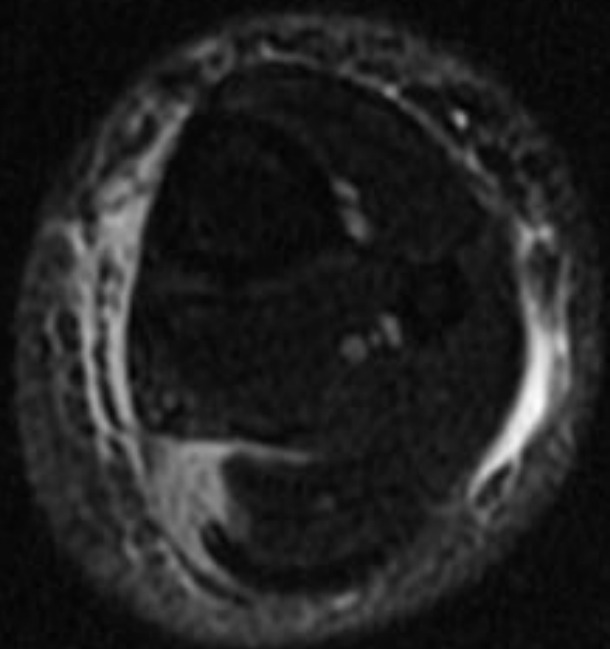
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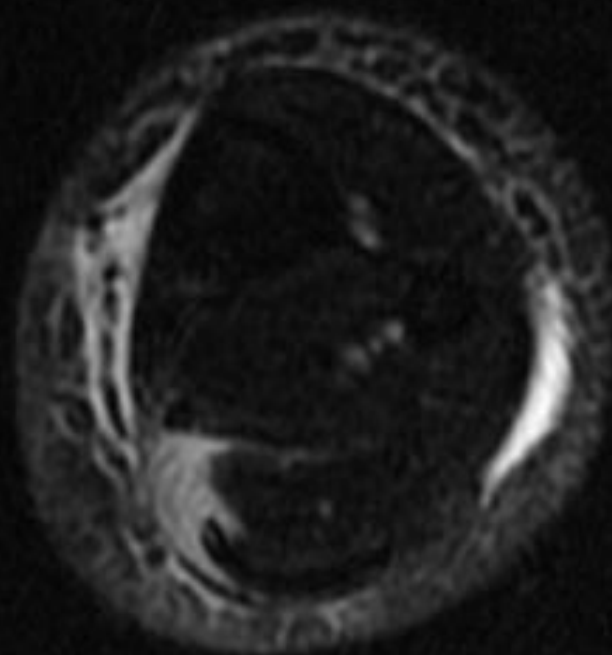
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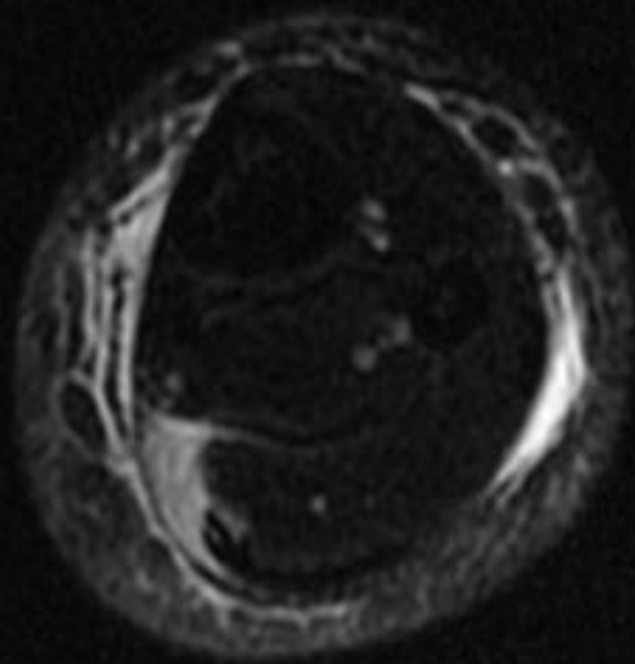
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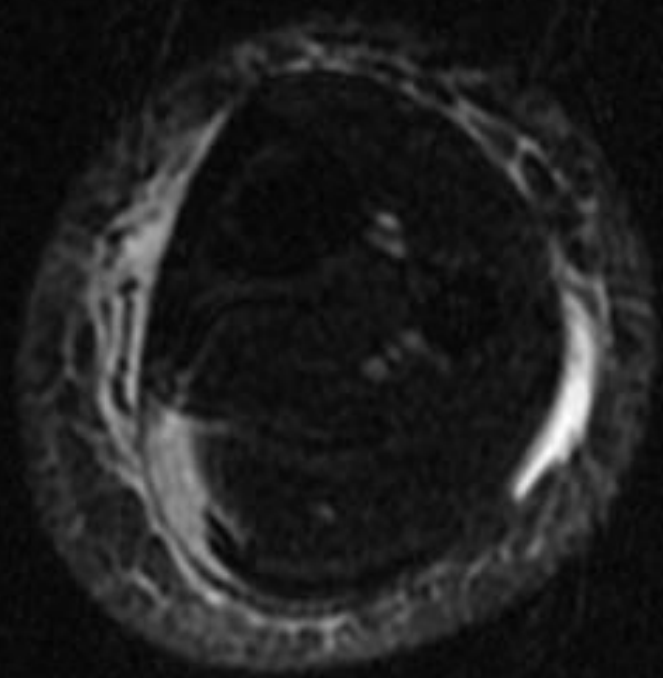
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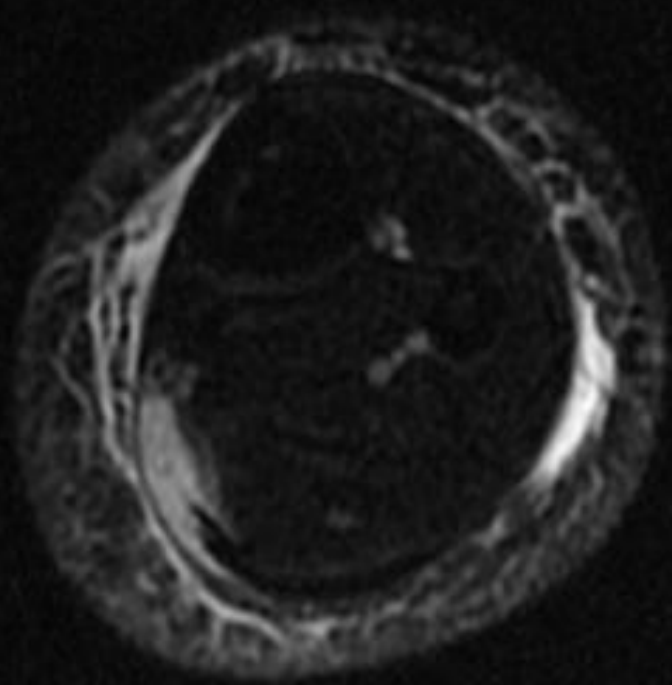
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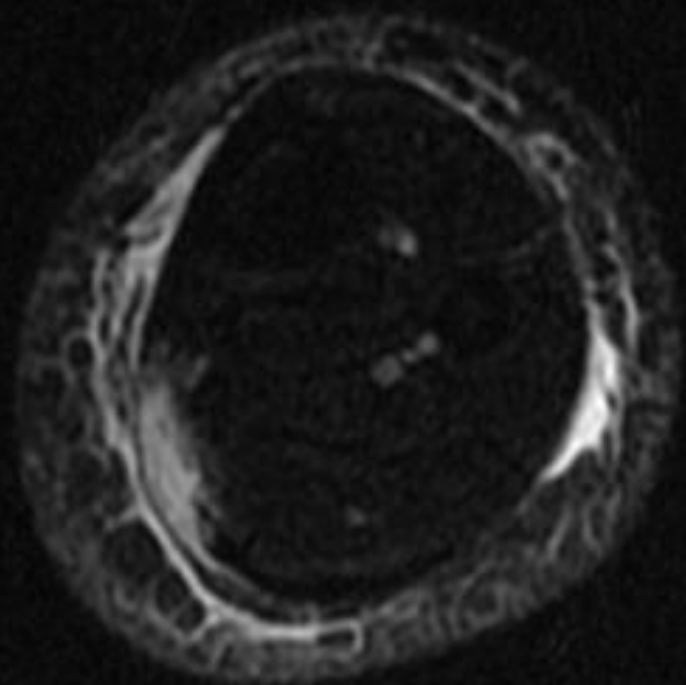
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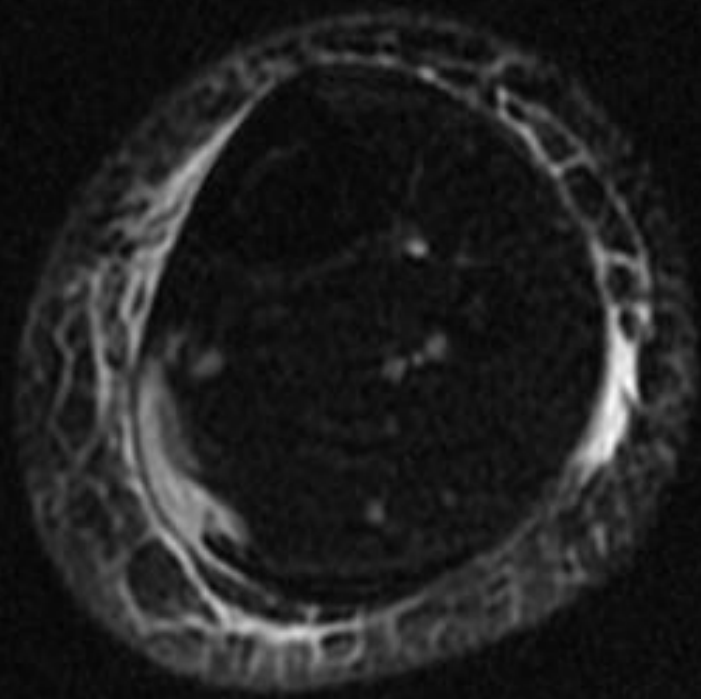
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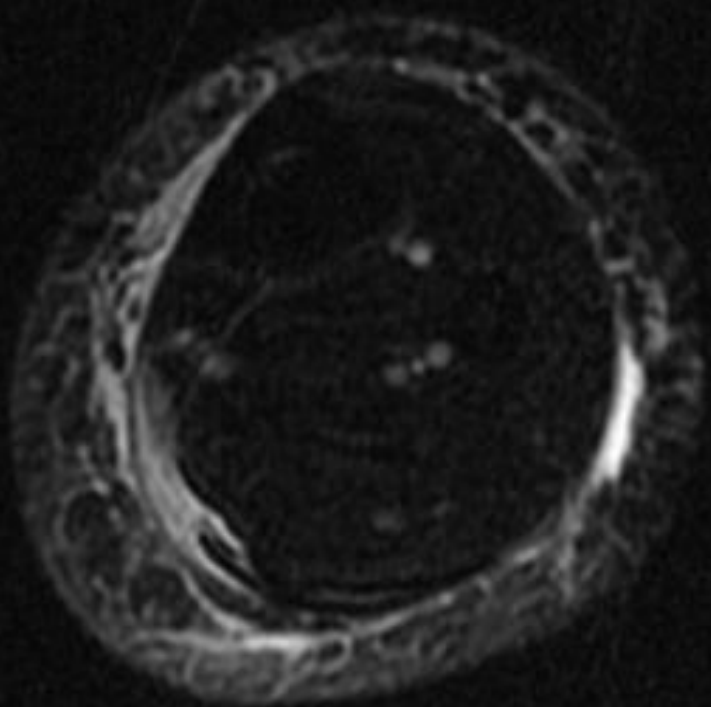
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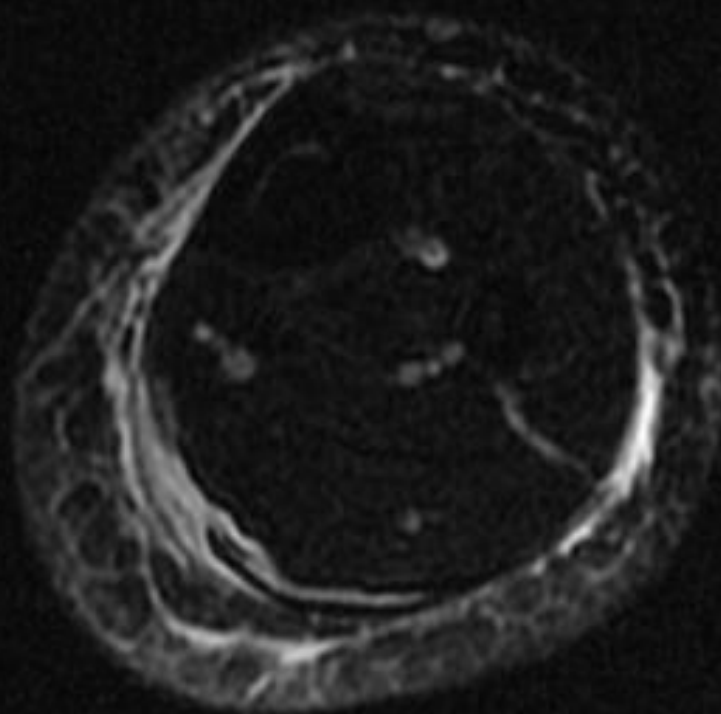
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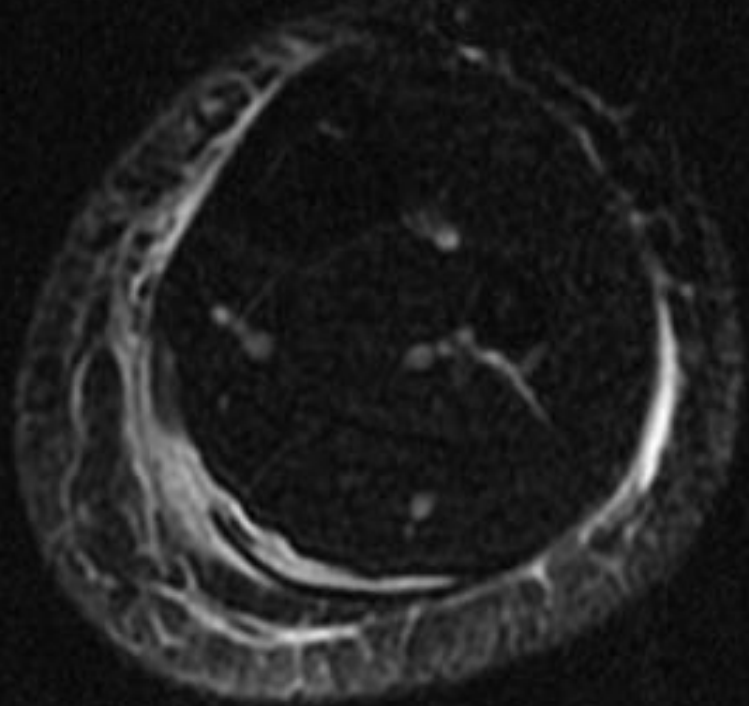
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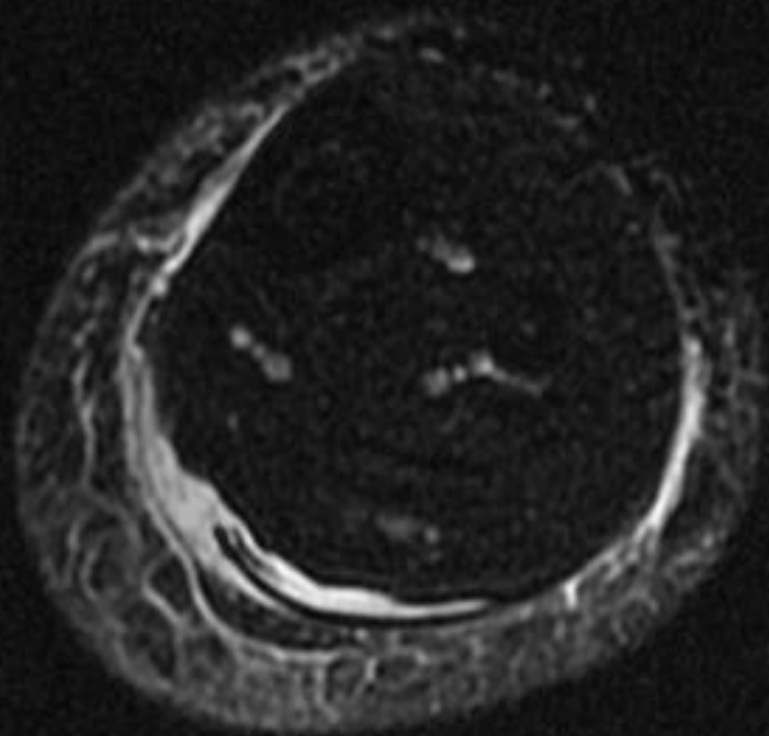
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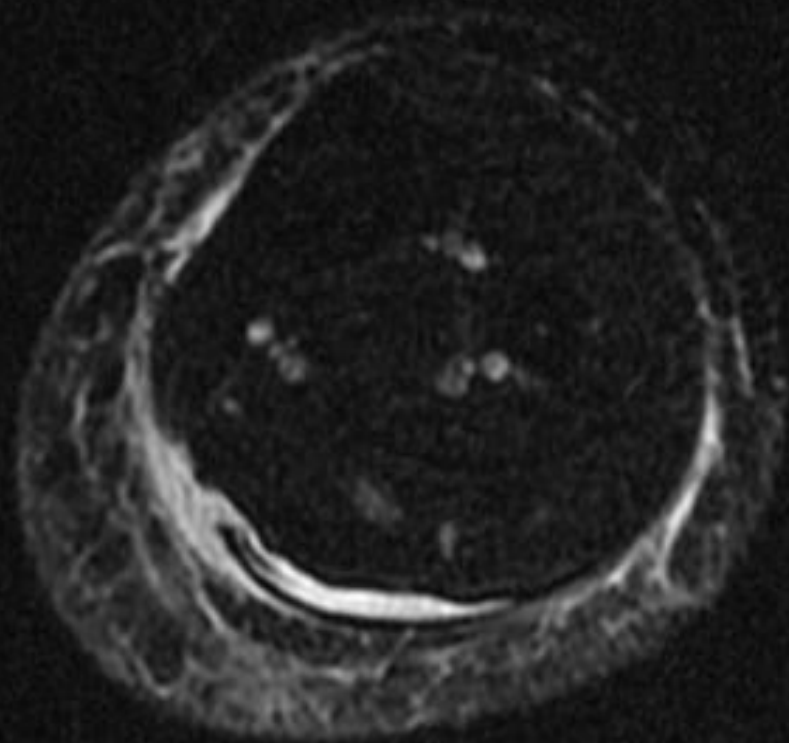
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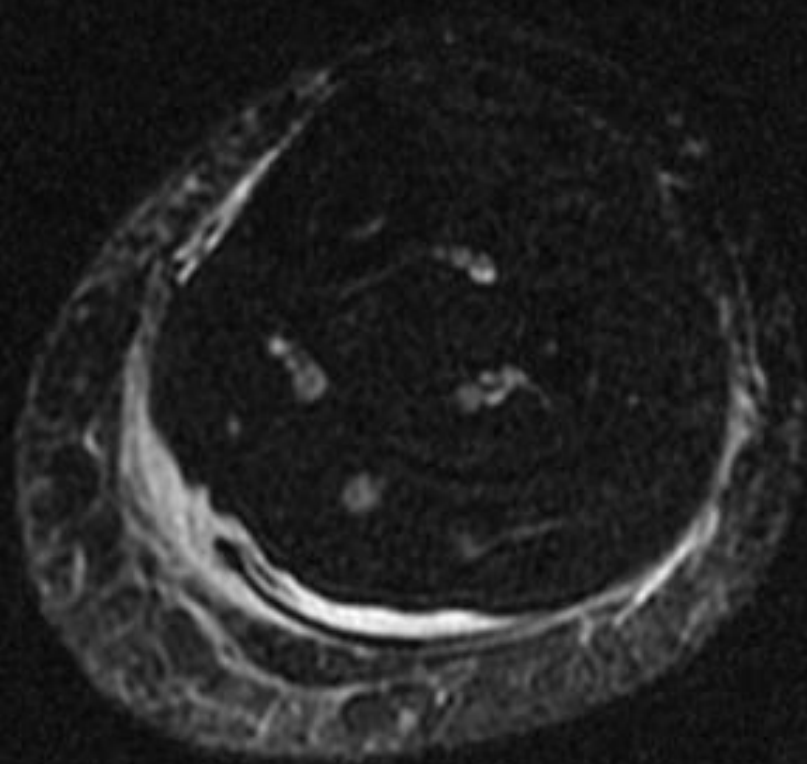
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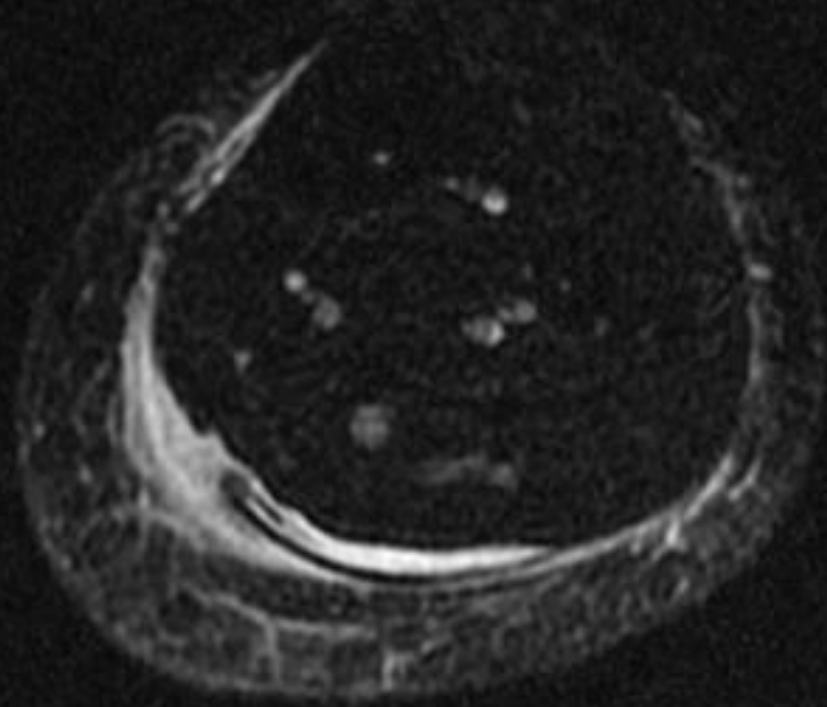
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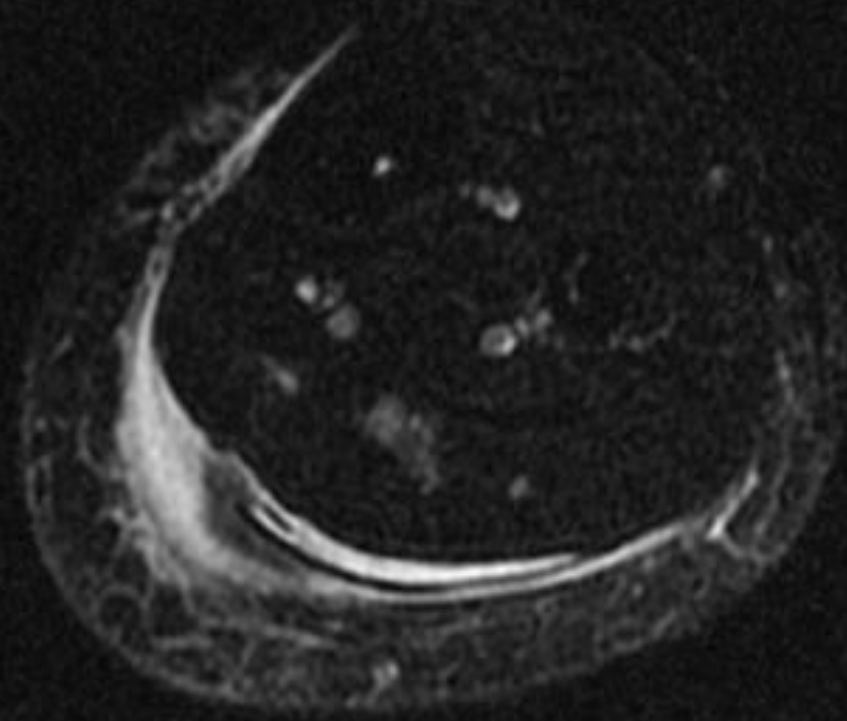
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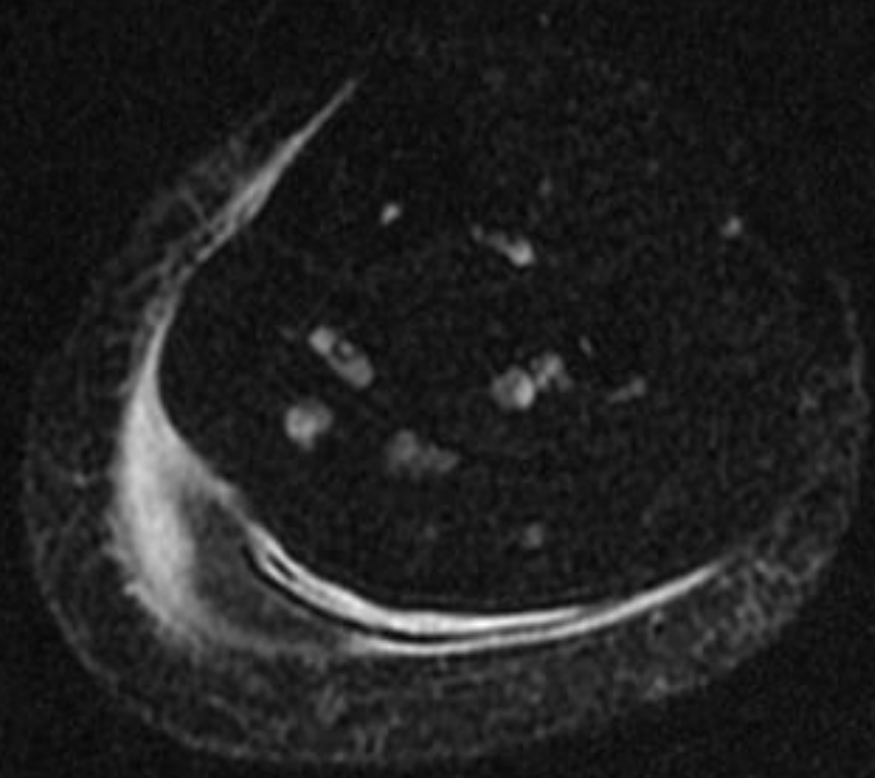
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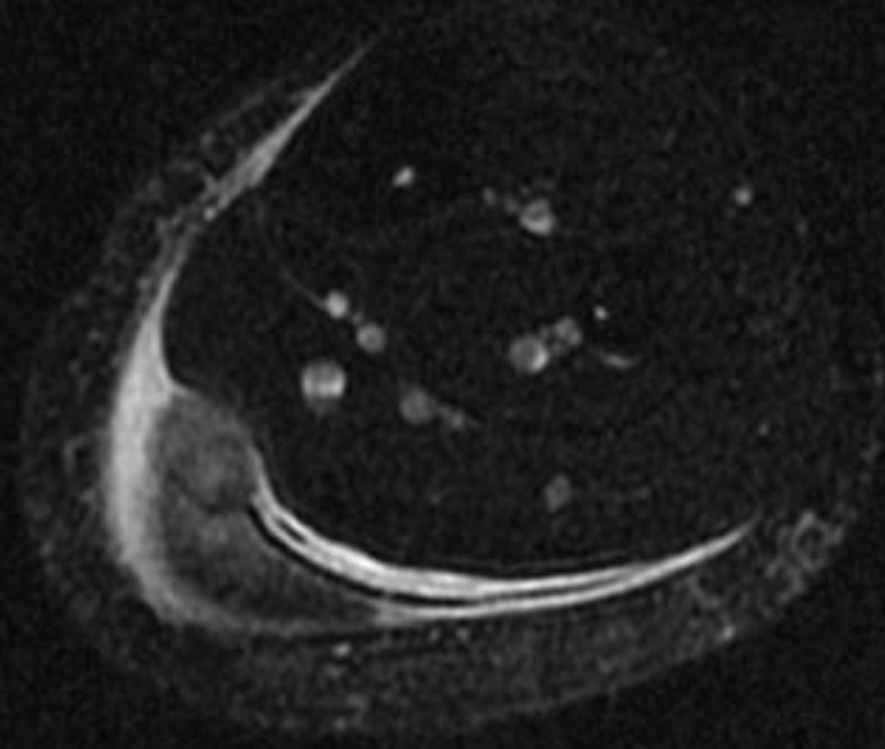
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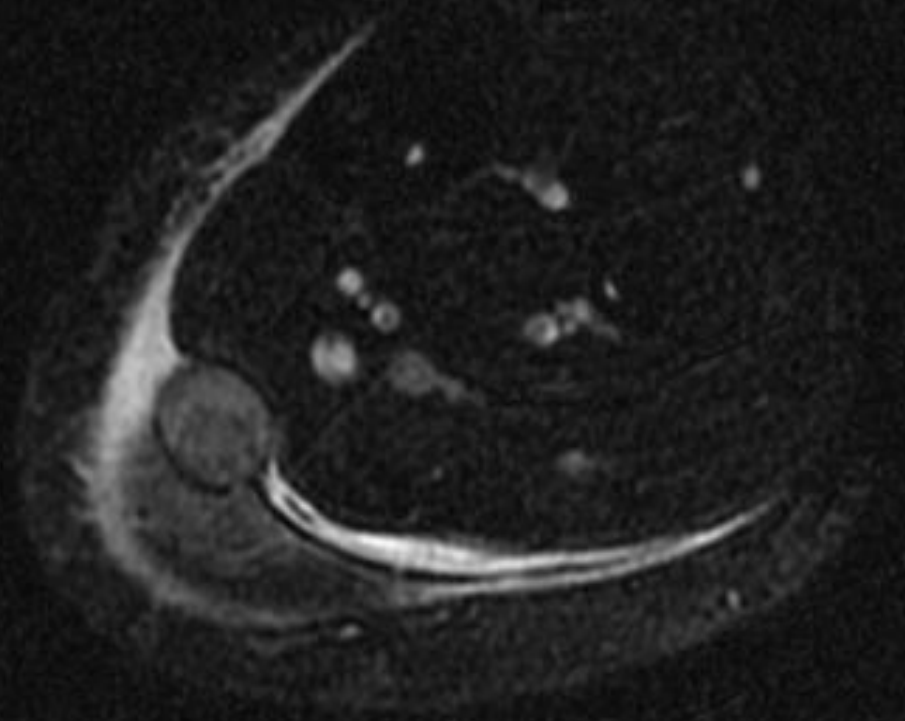
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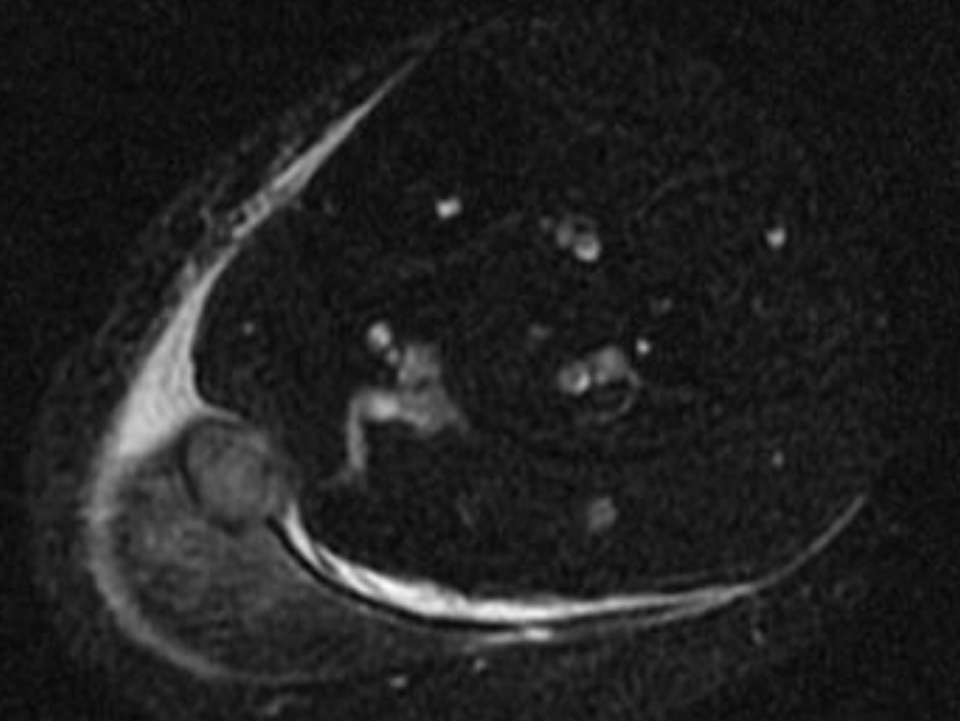
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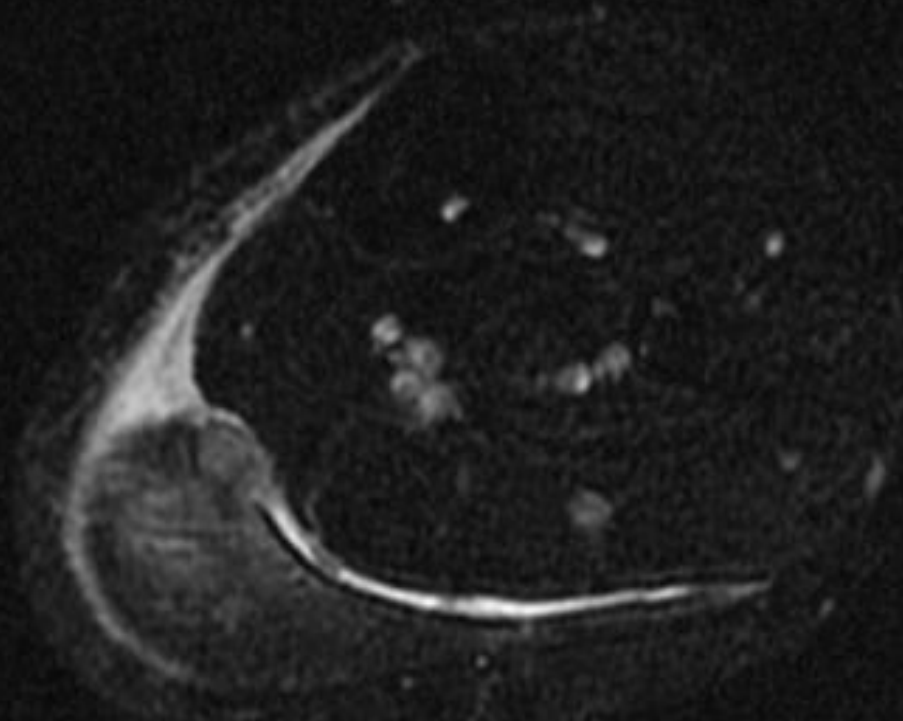
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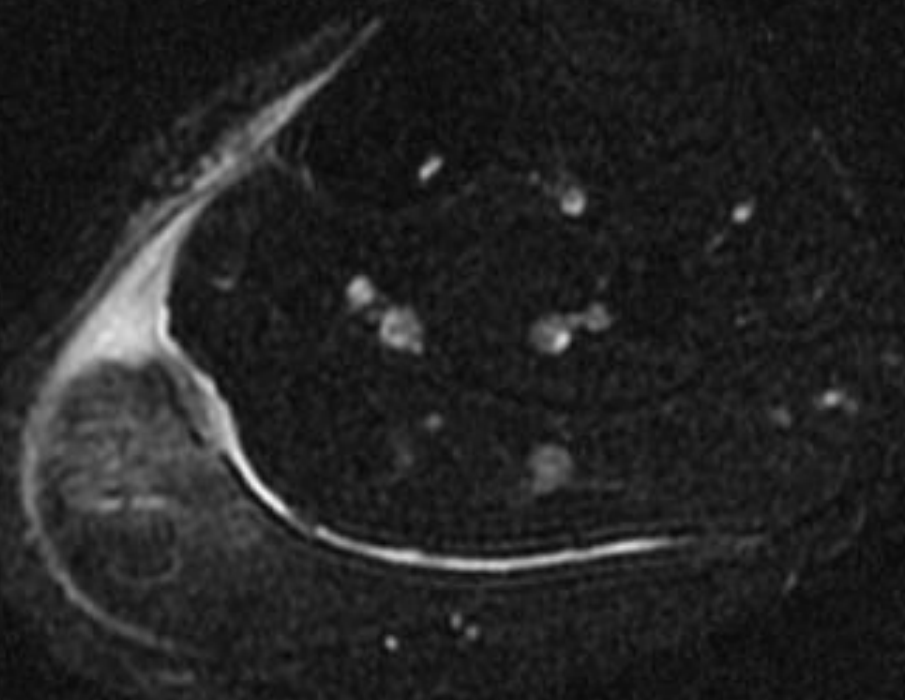
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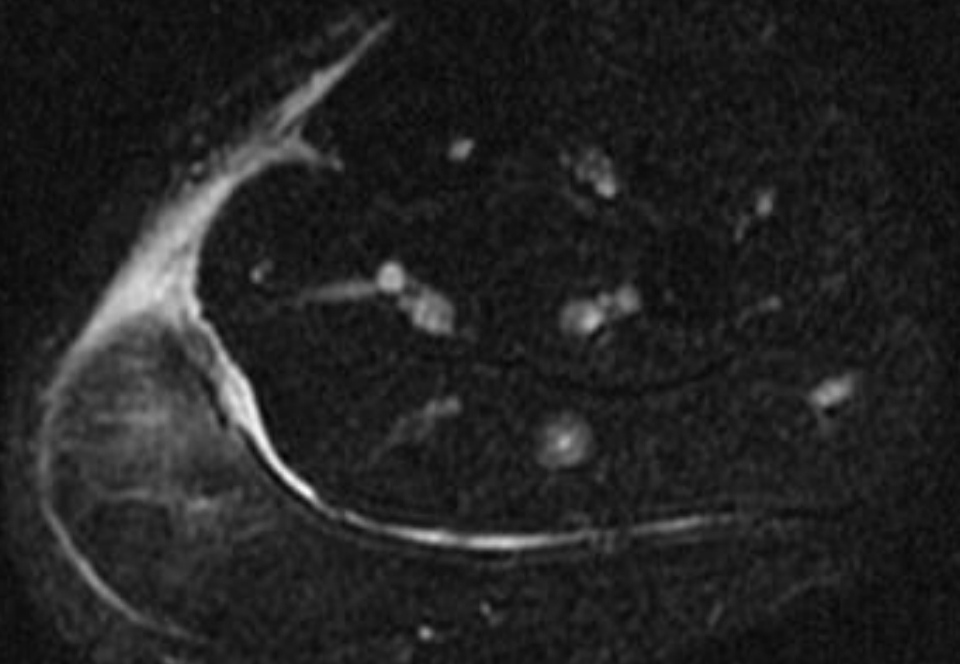
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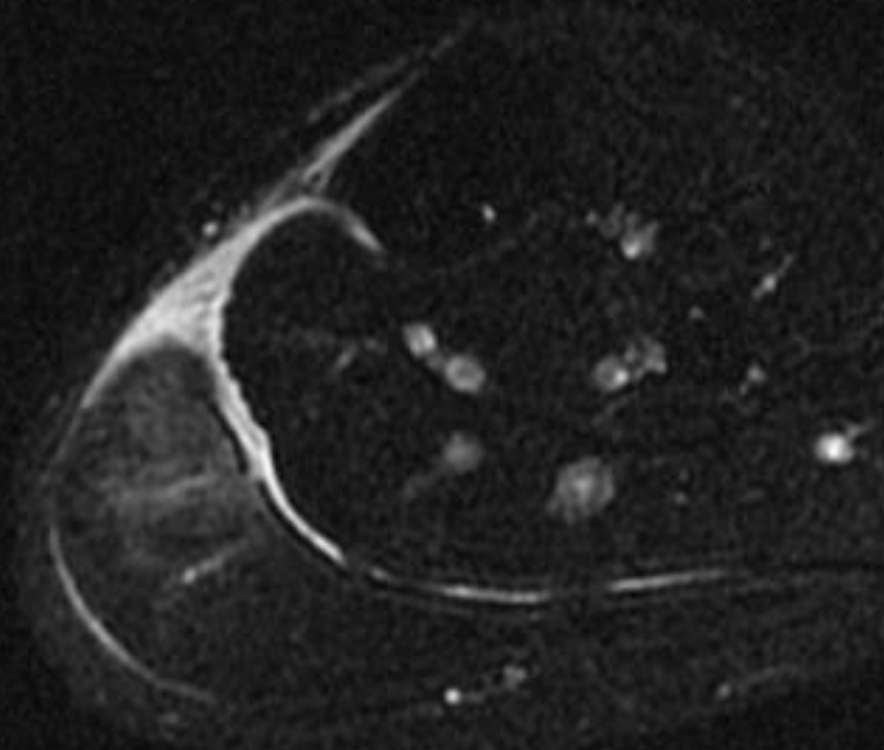
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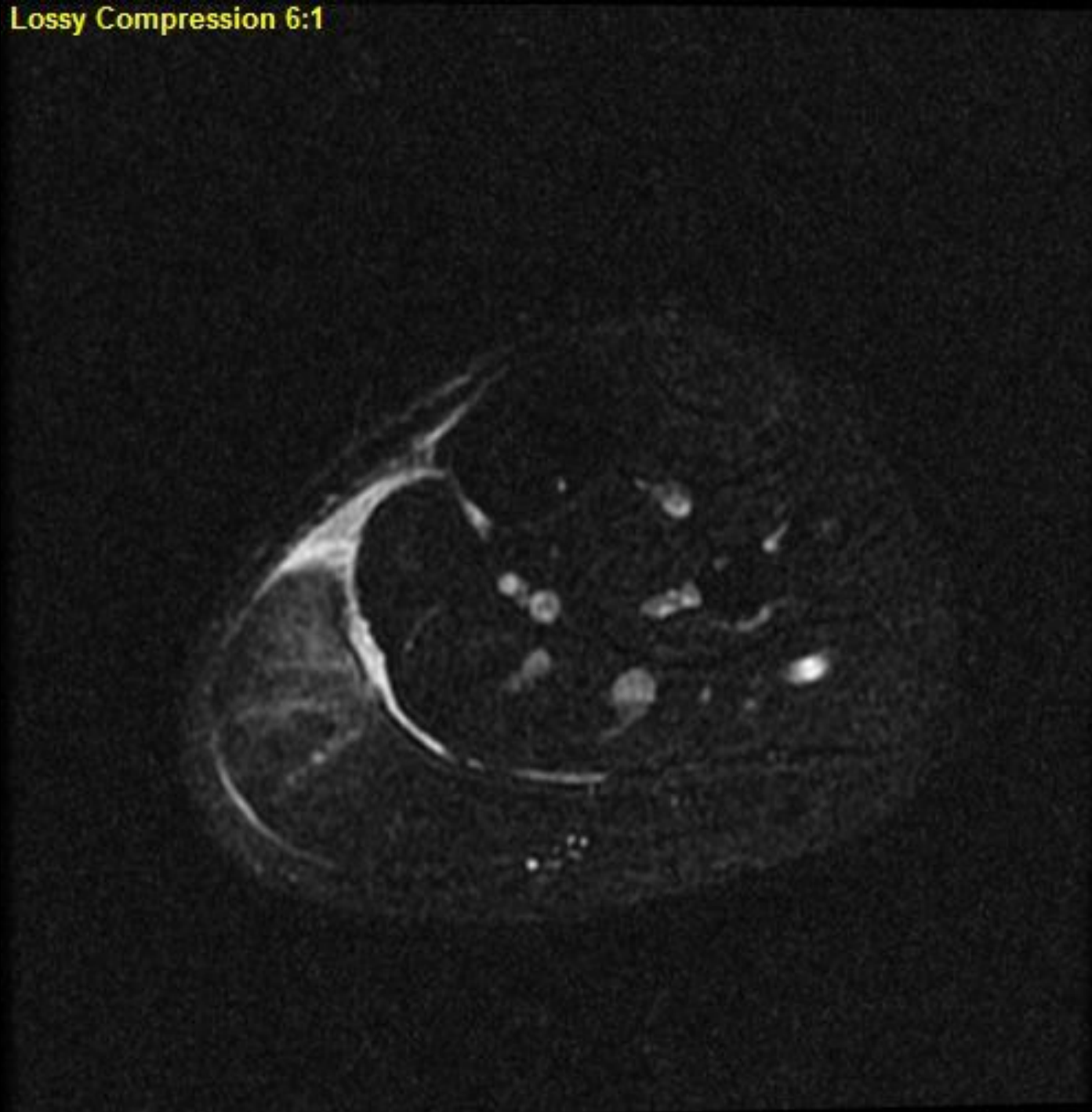
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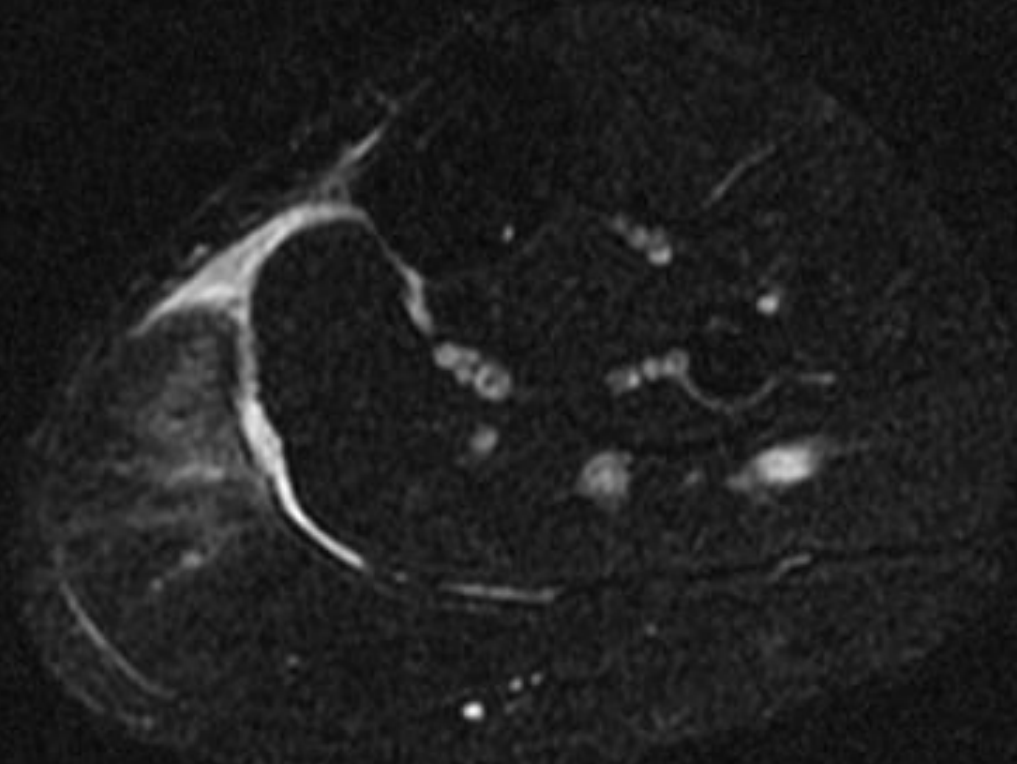
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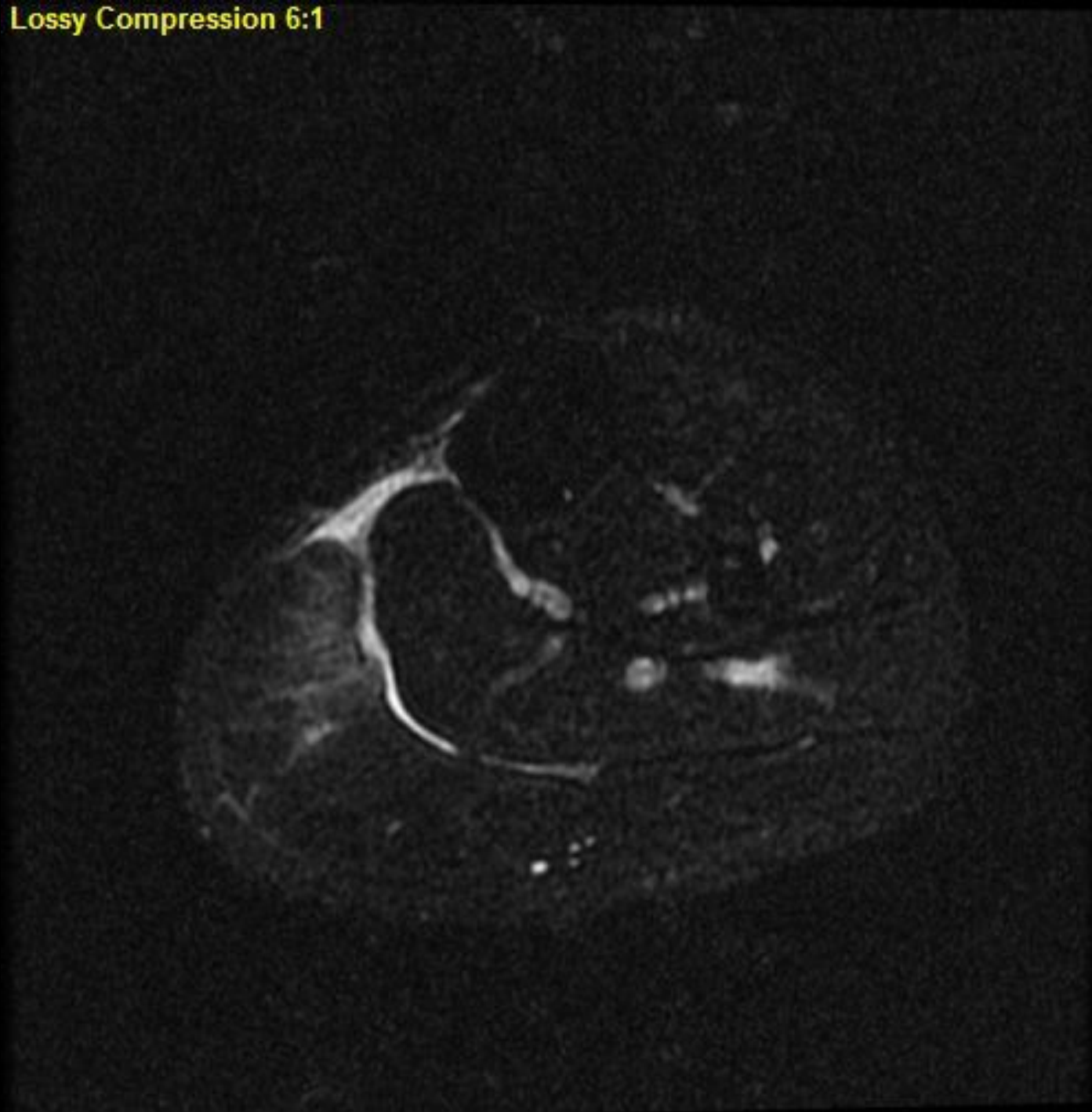
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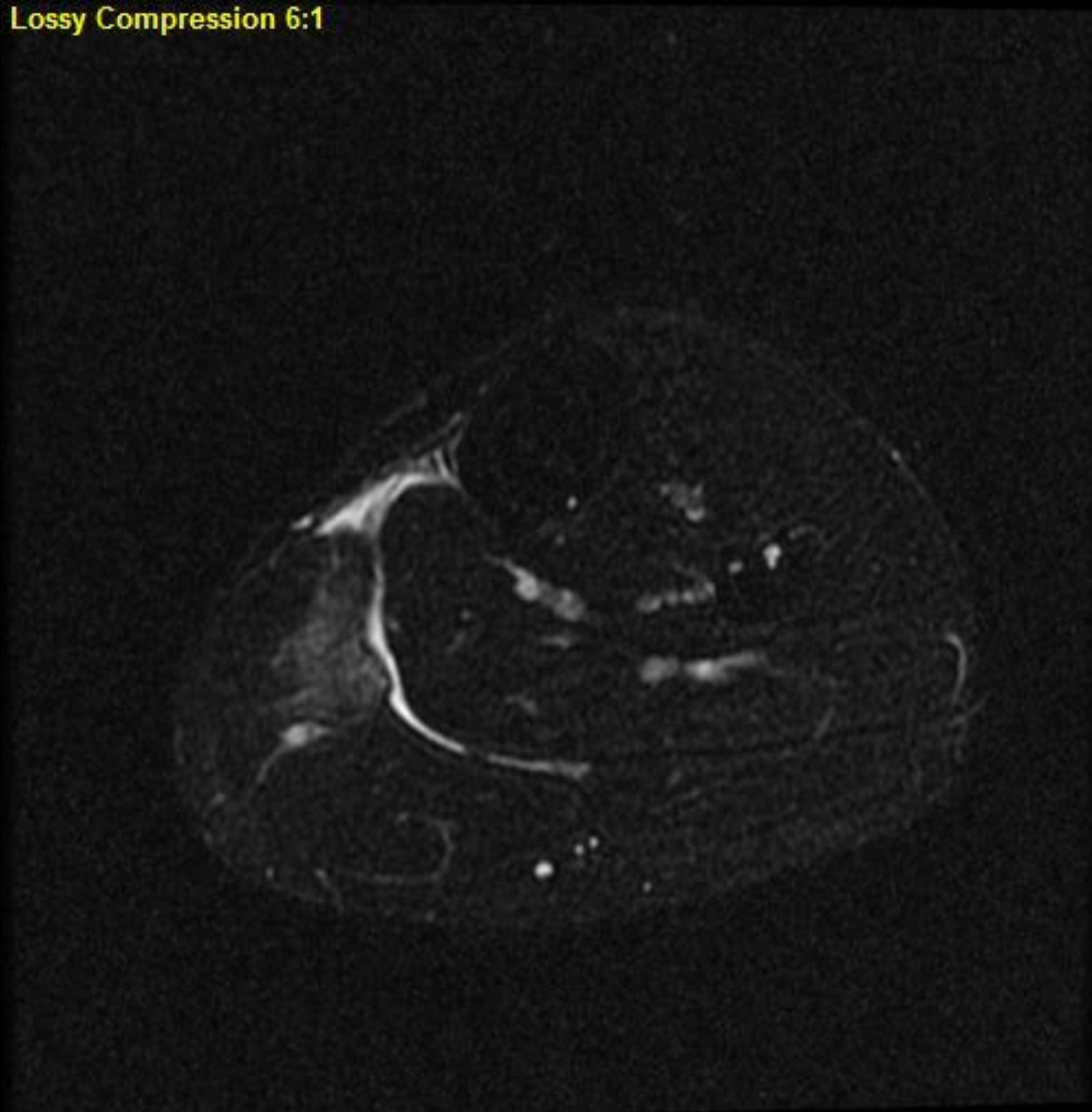
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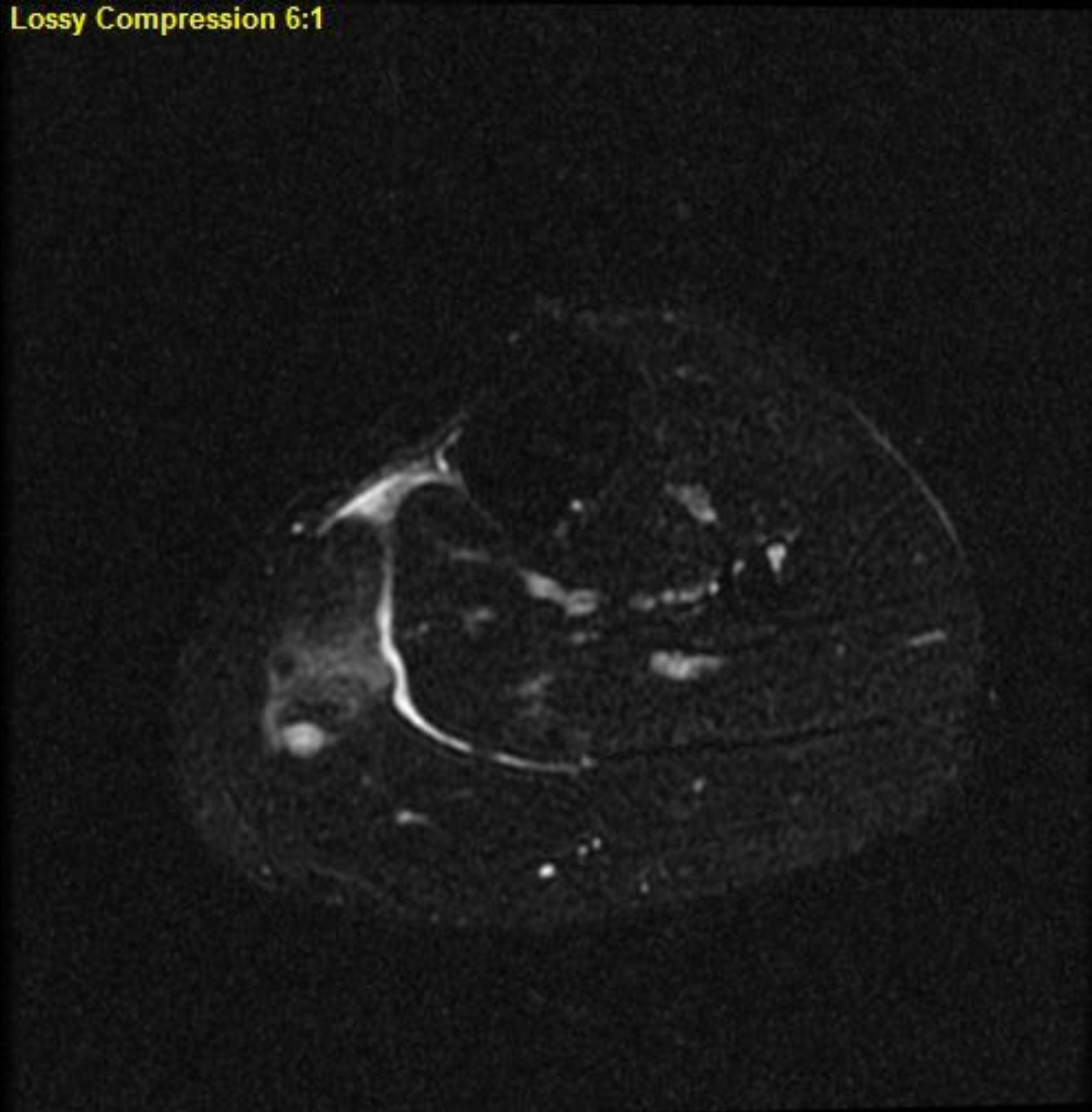
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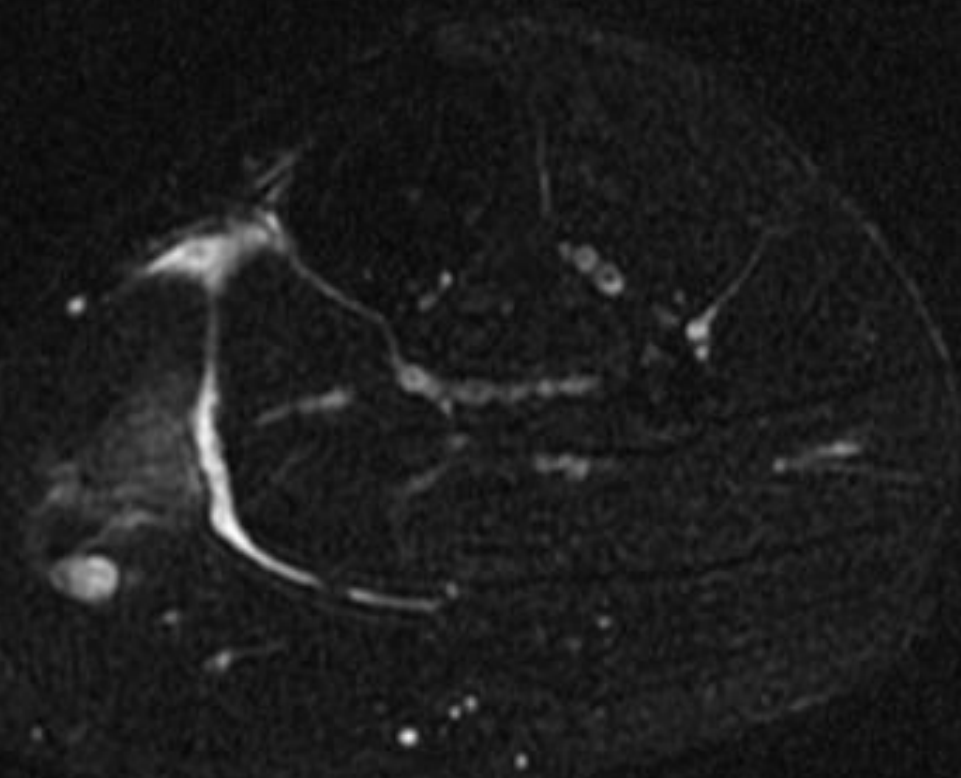
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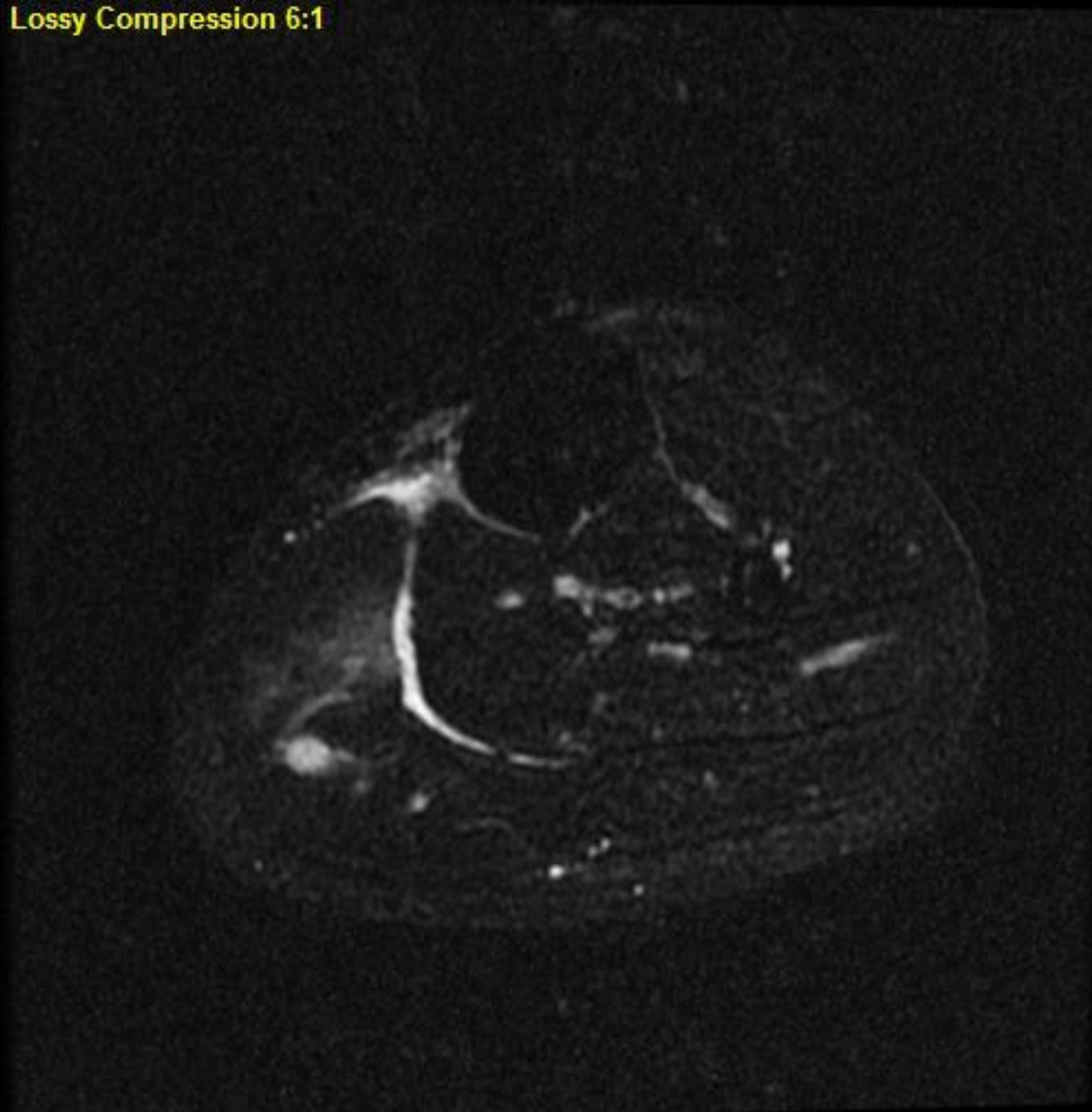
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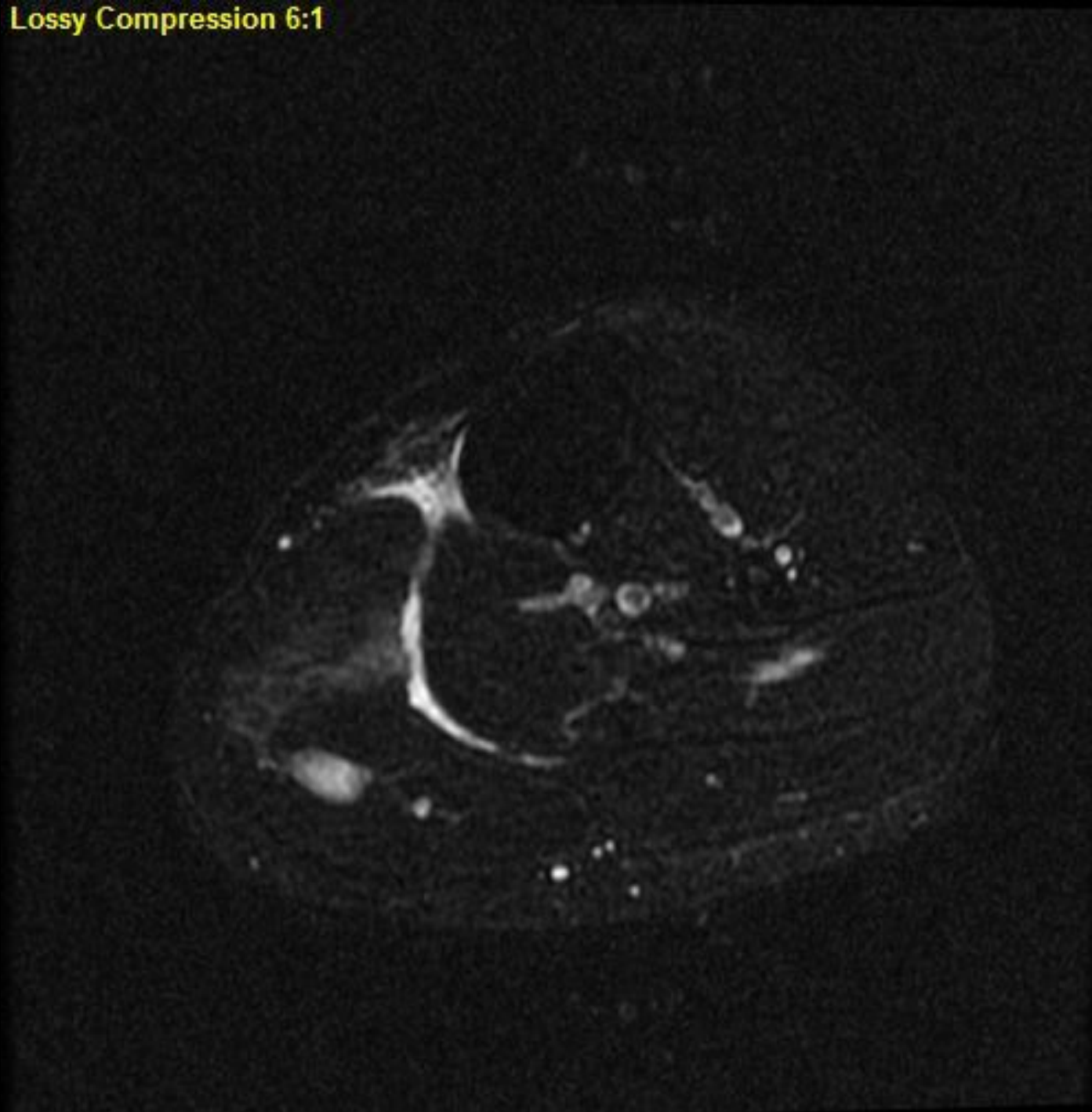
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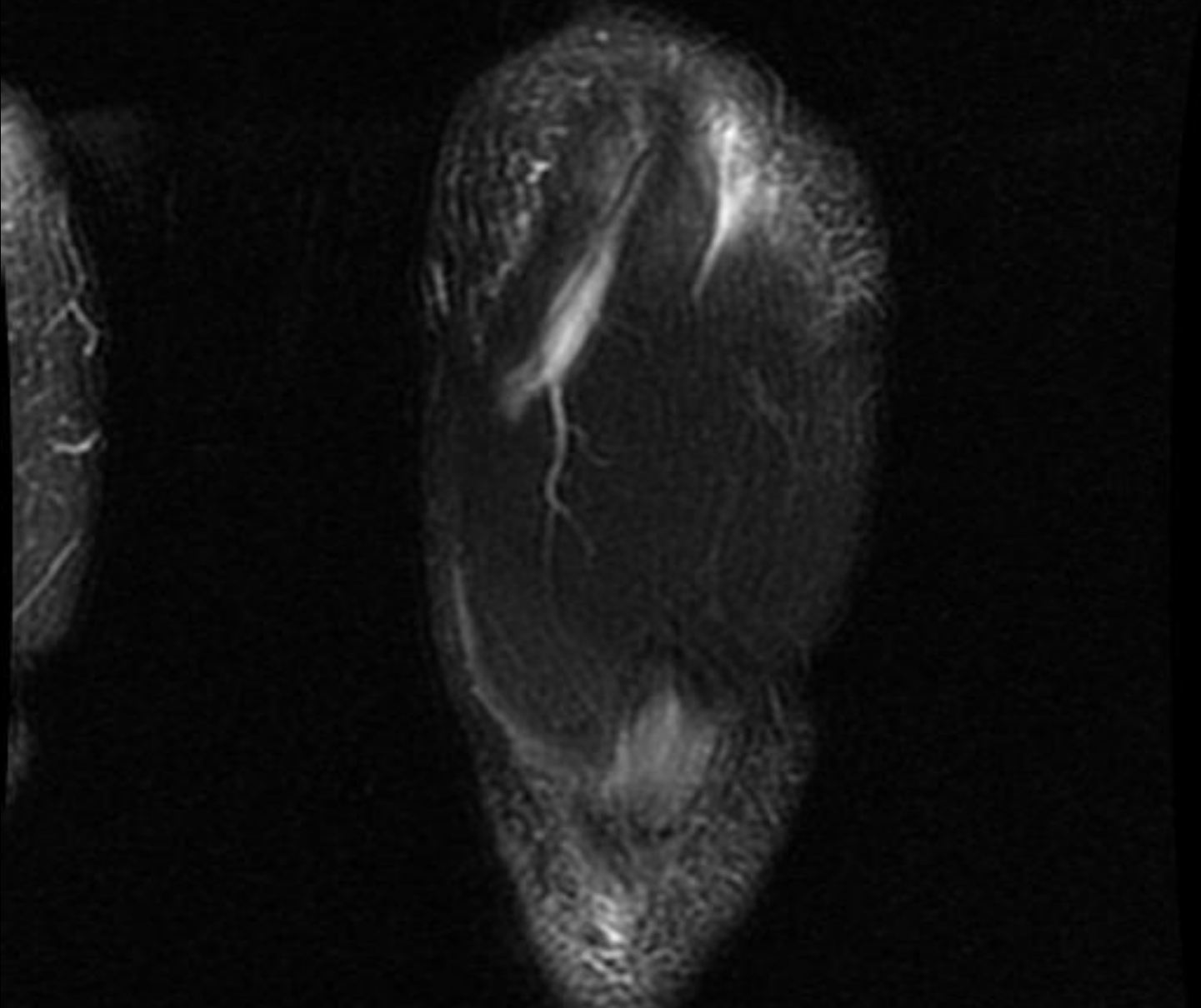
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Lossy Compression 6:1

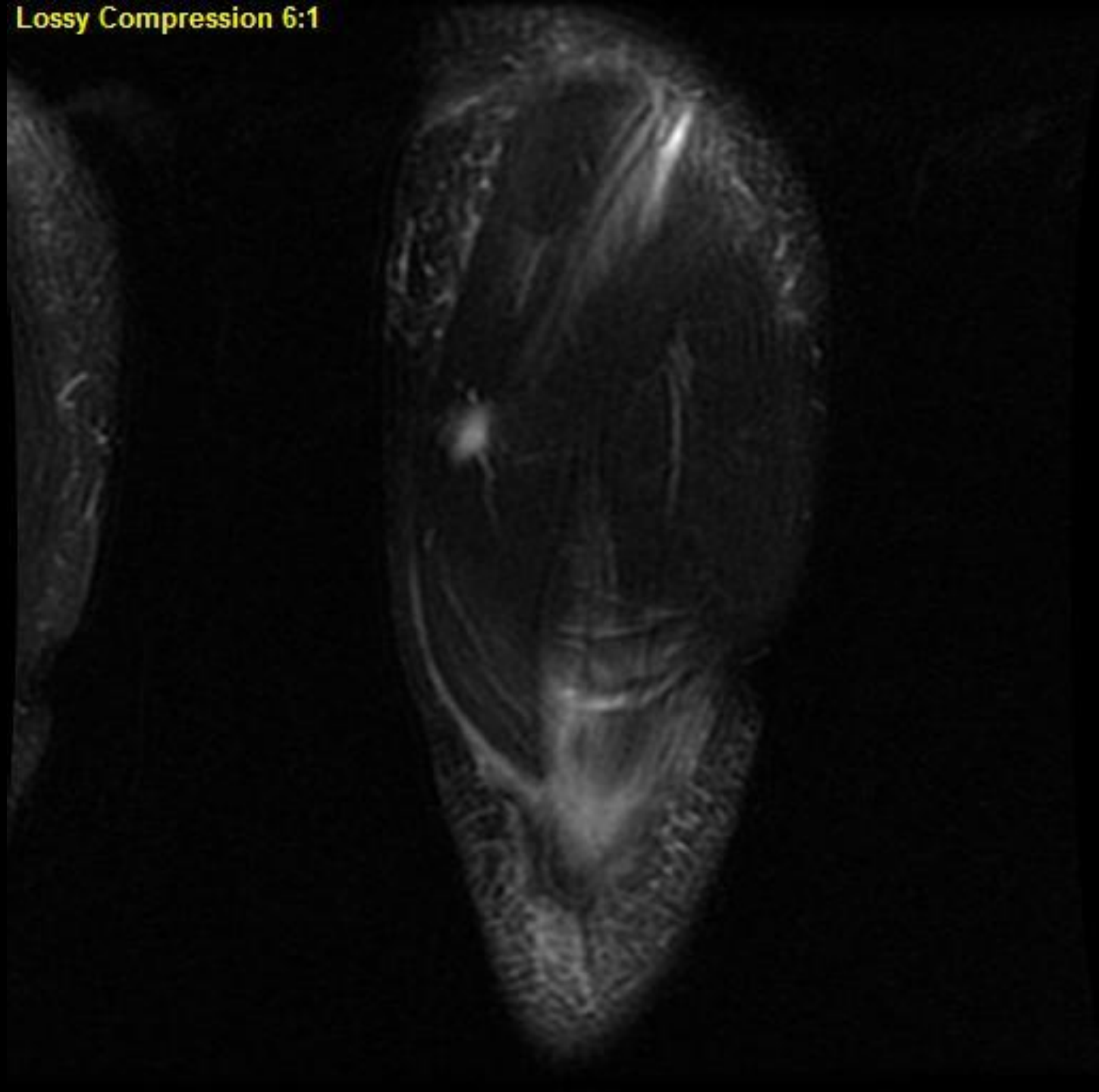


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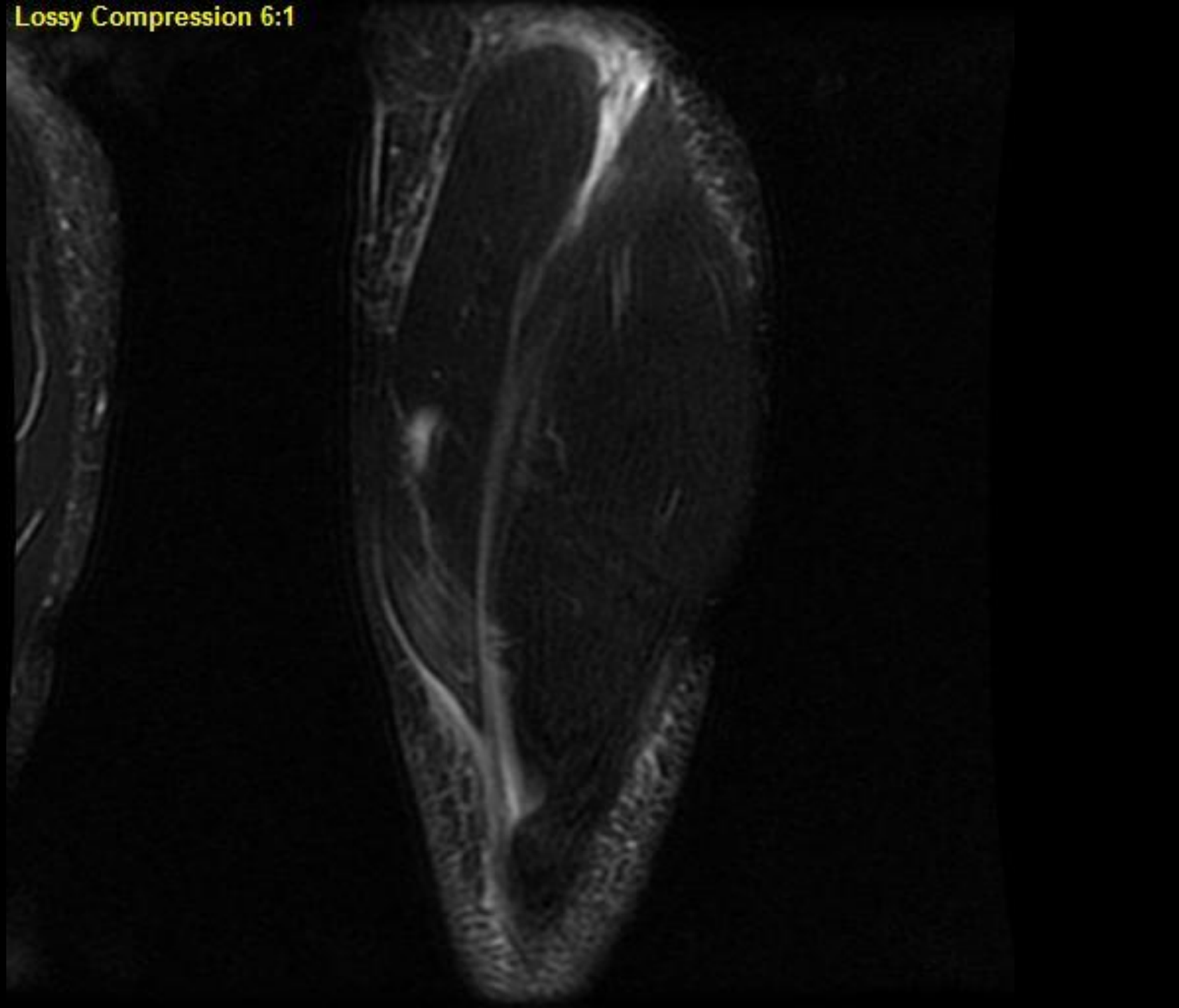


Coronal FS fluid sensitive

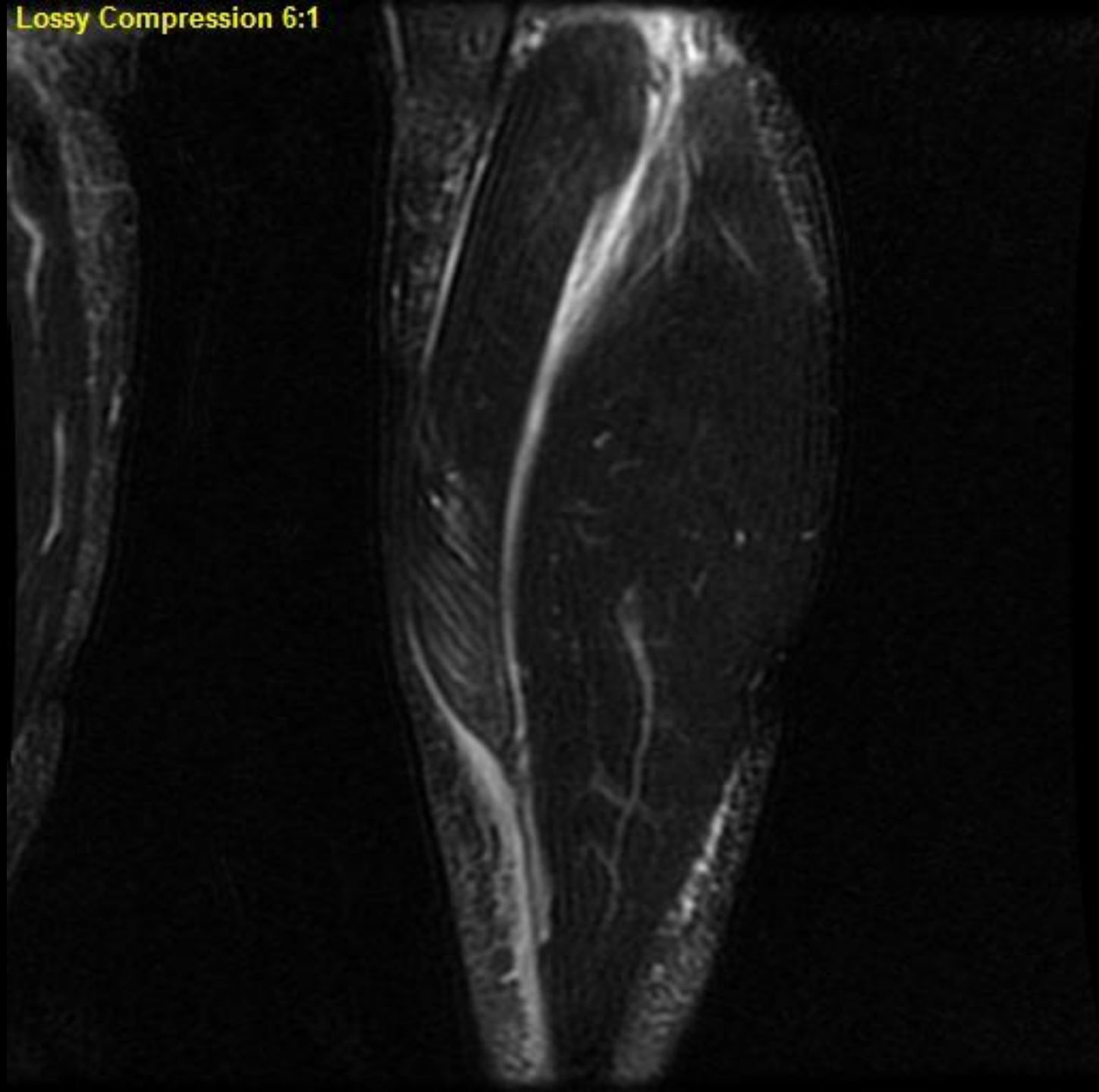
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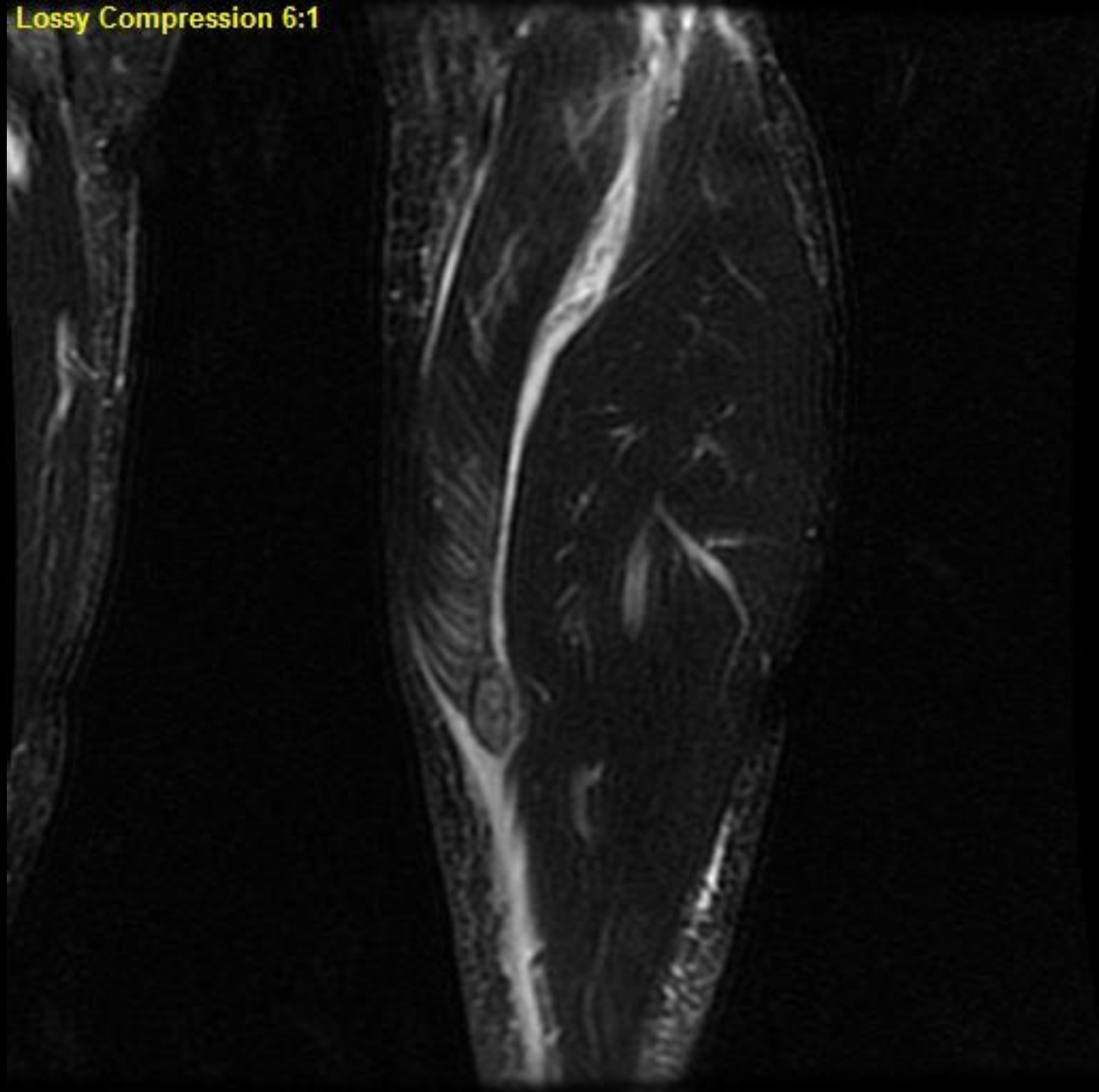
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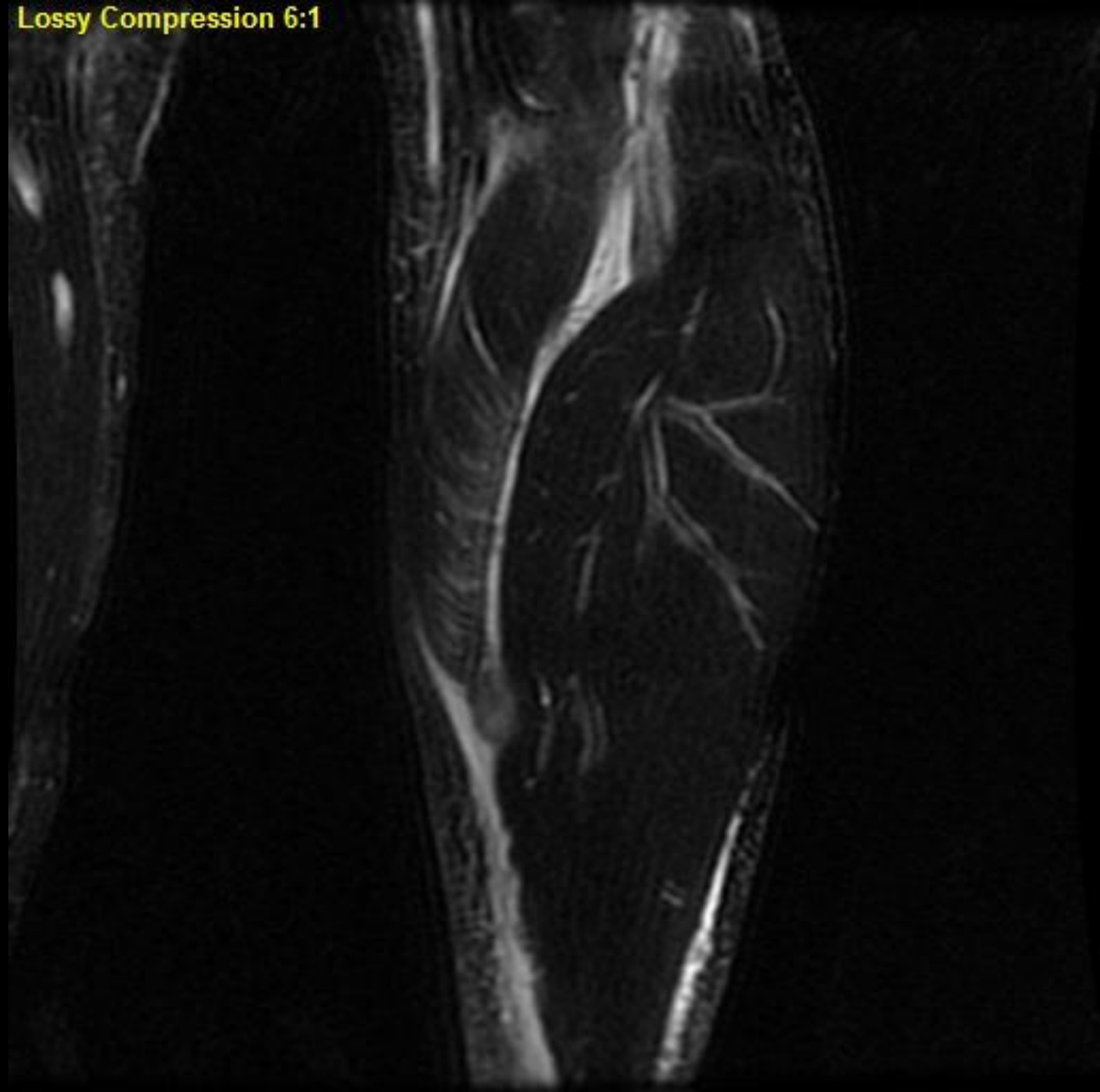
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Lossy Compression 6:1



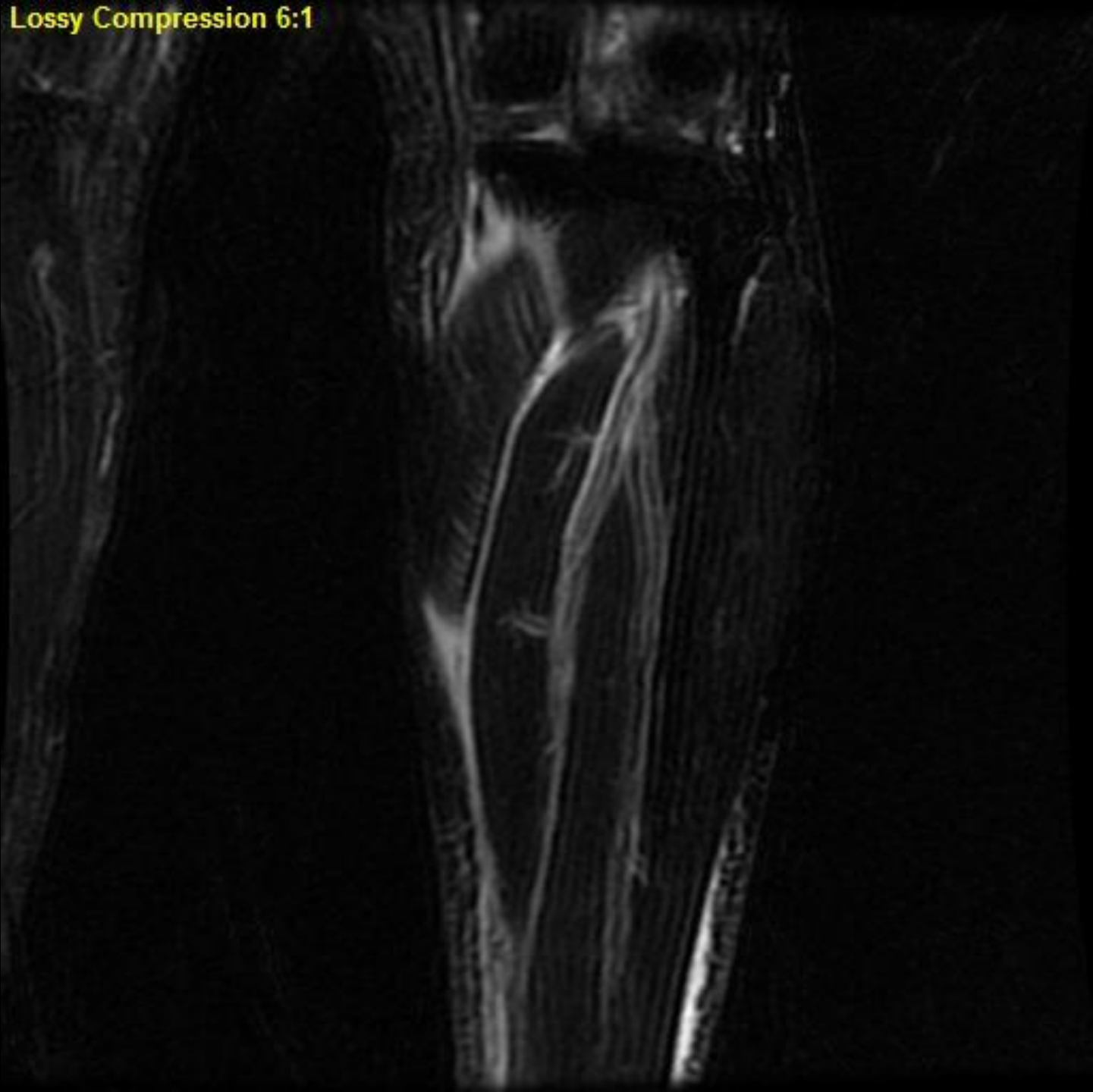
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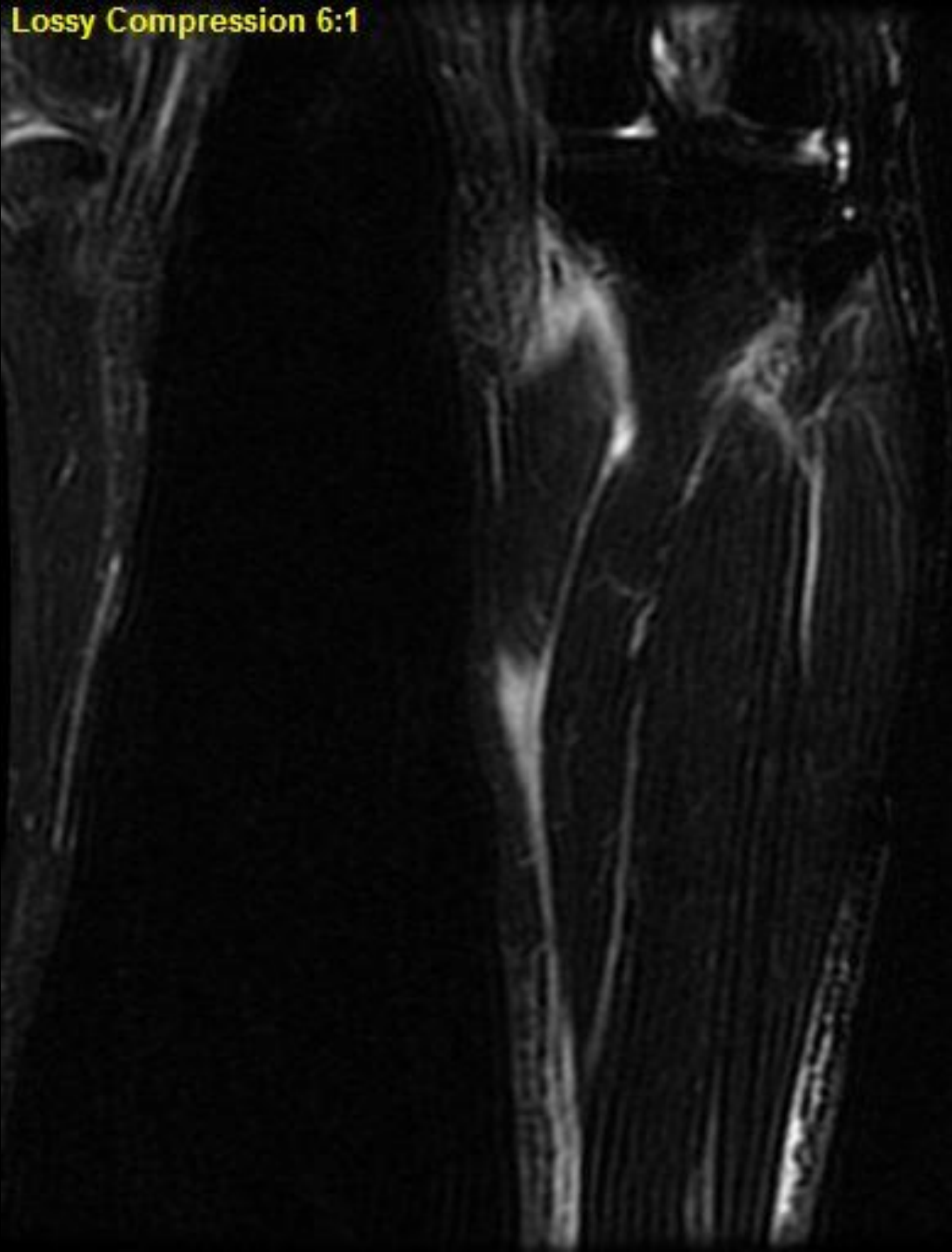
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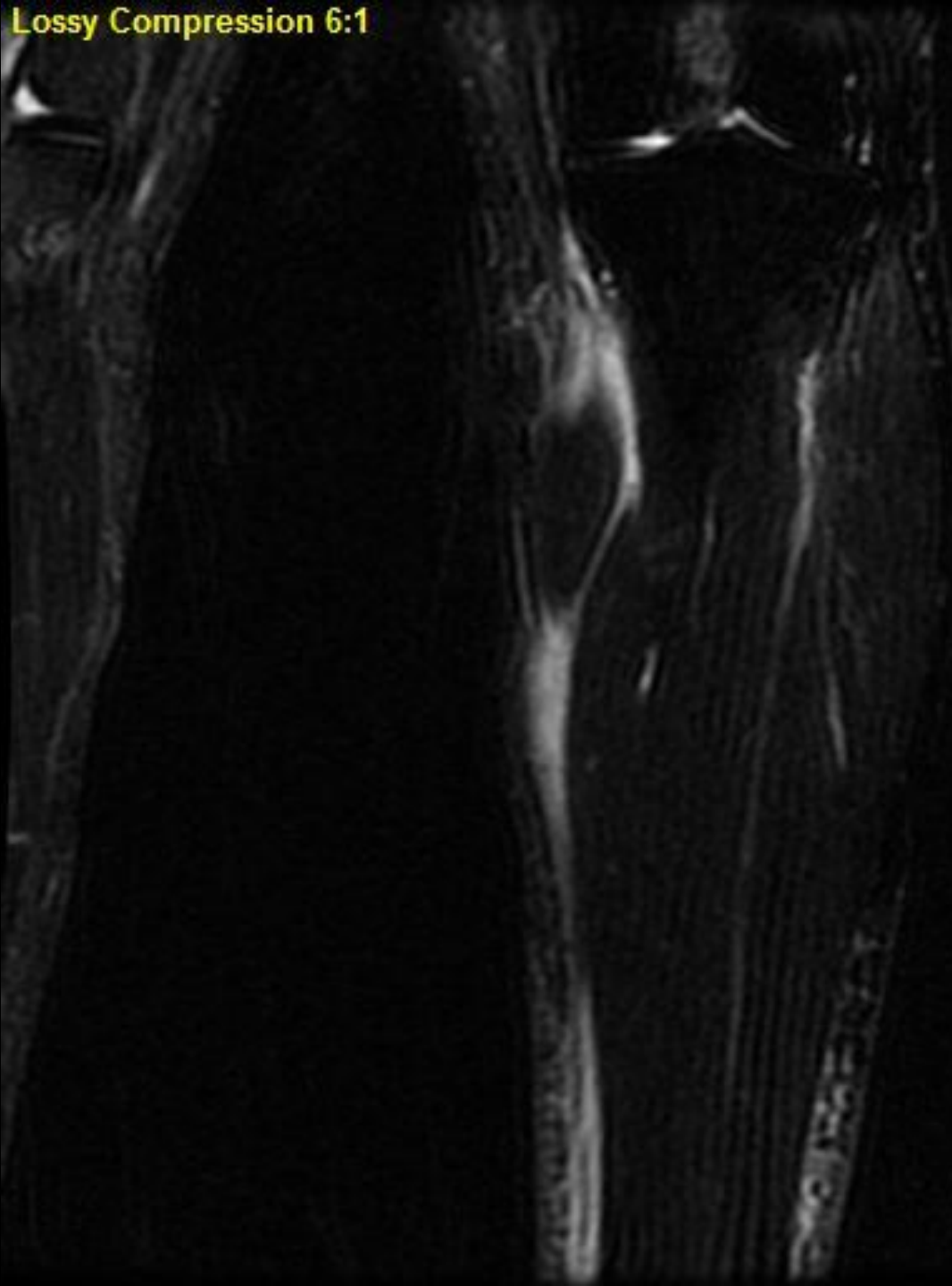
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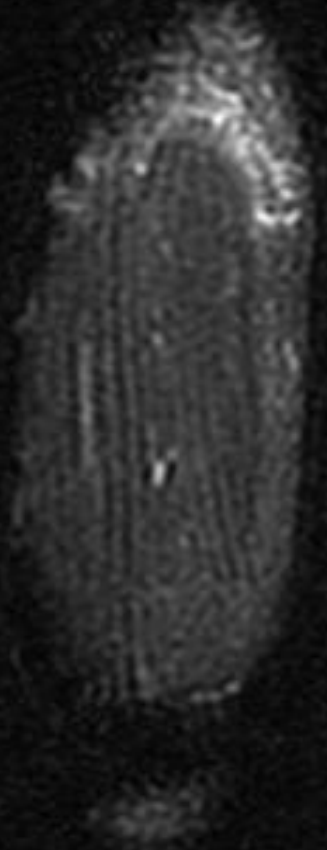
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Lossy Compression 6:1

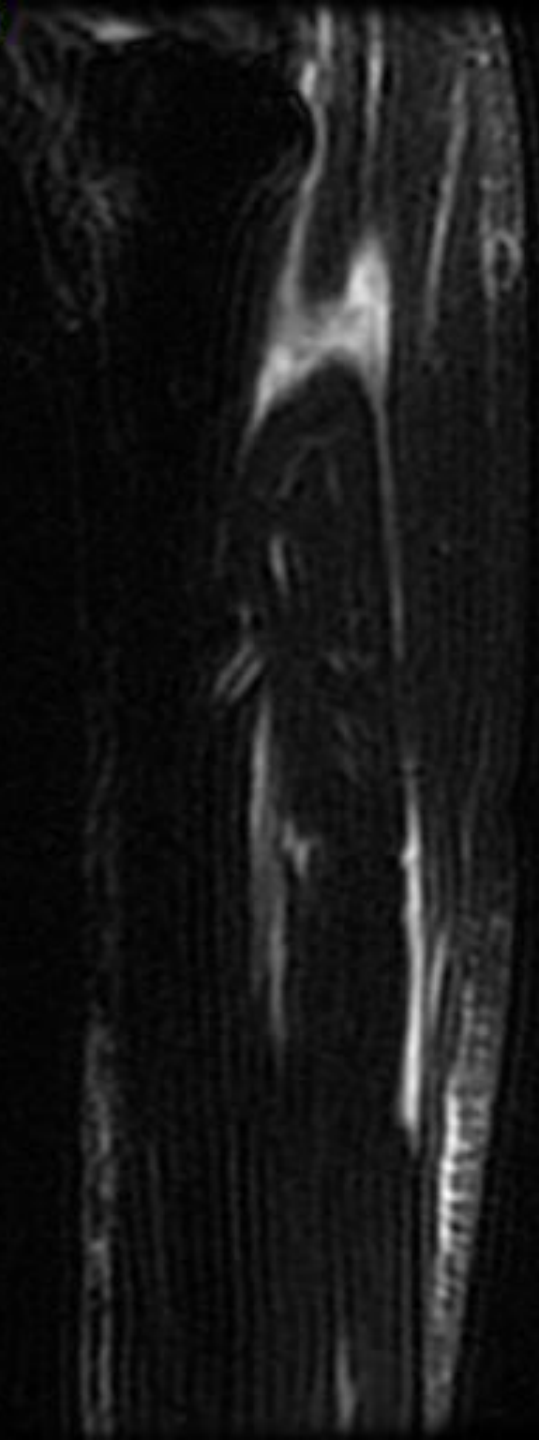


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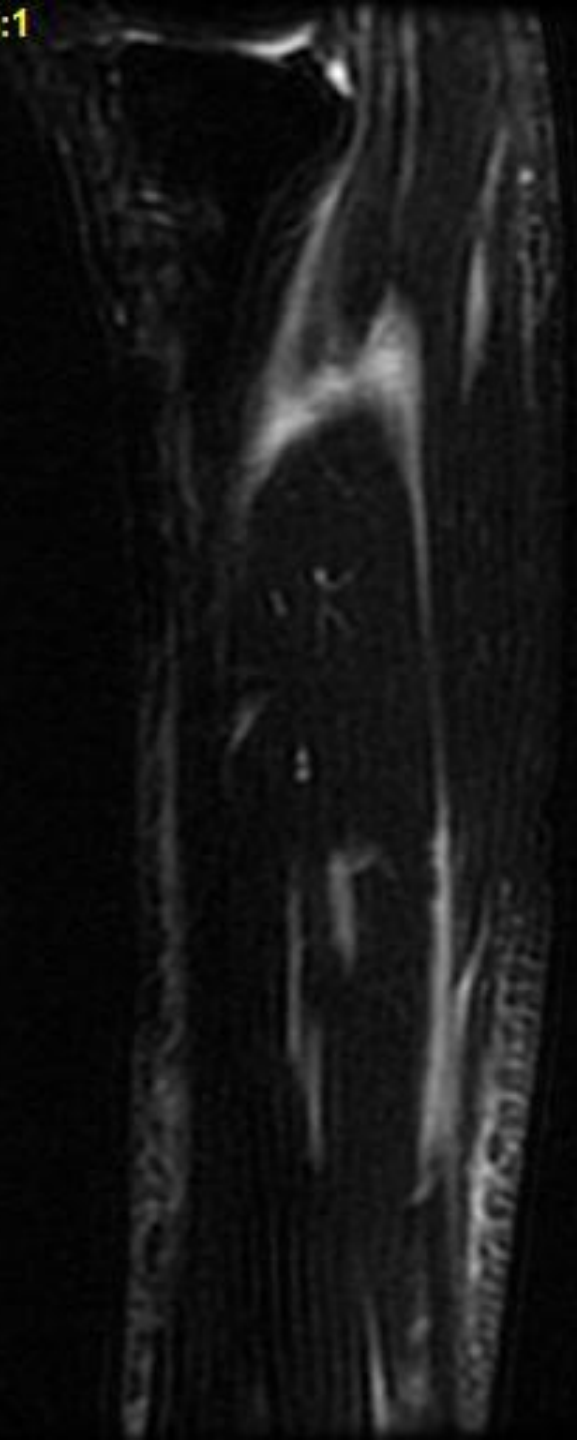


Sagittal FS fluid sensitive

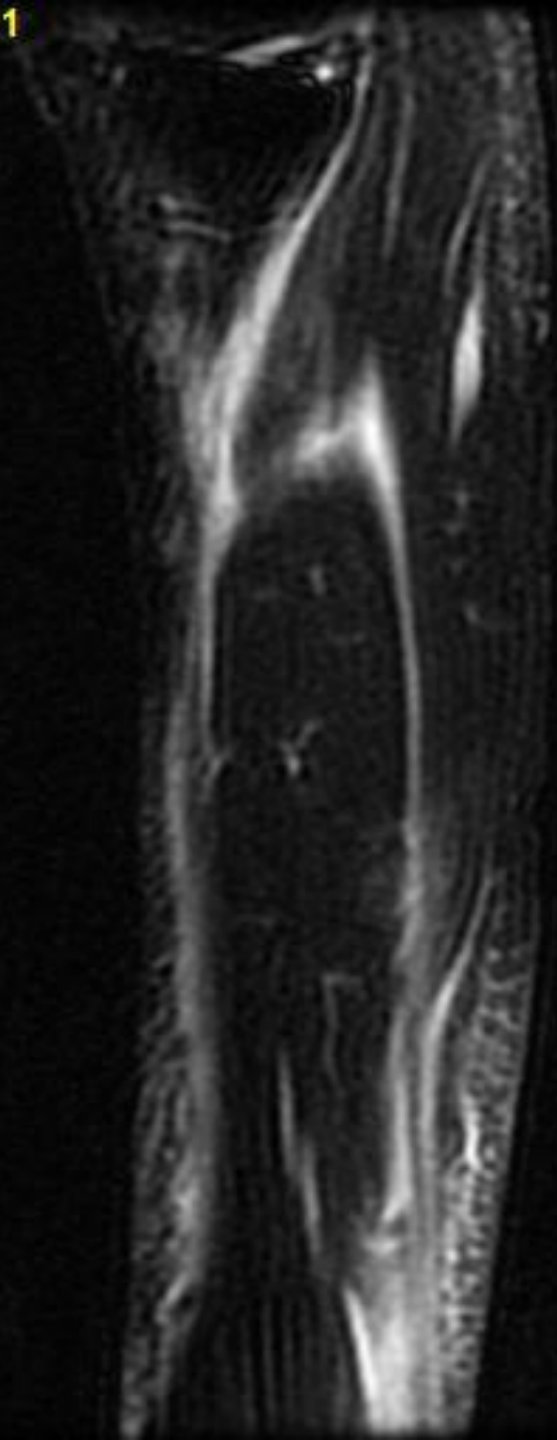
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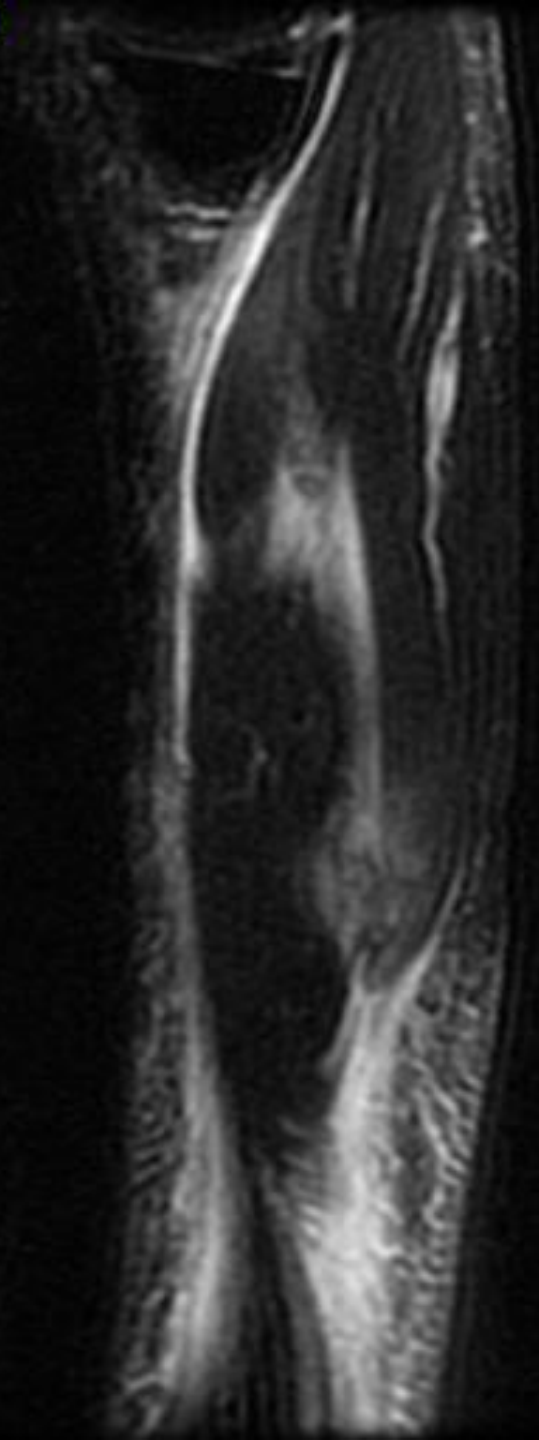
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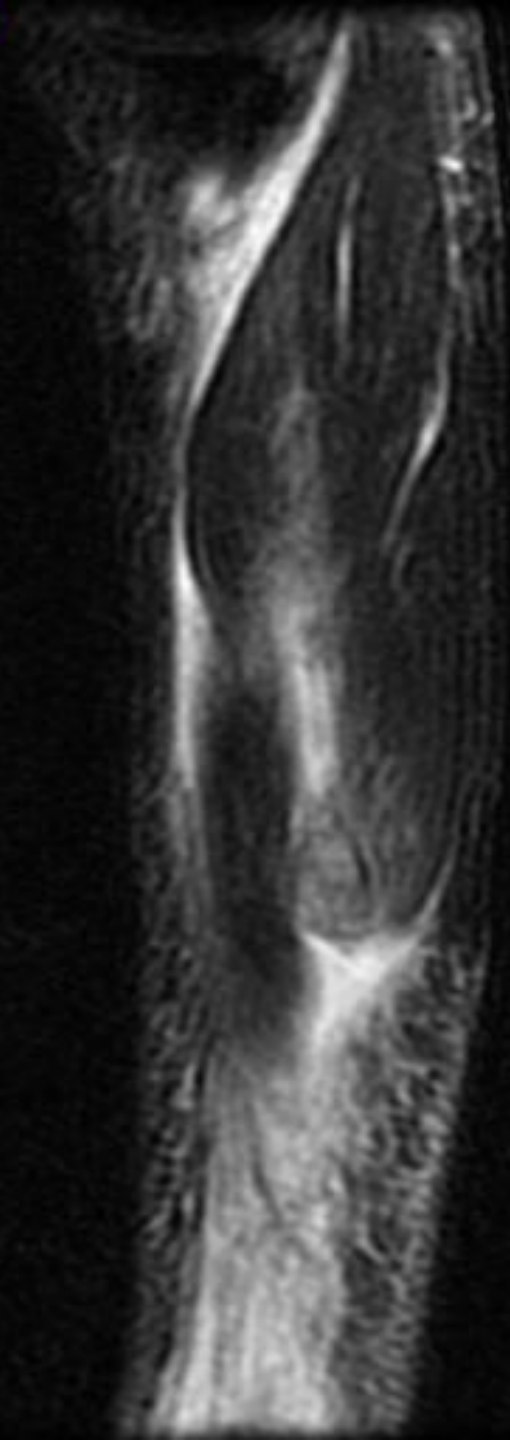
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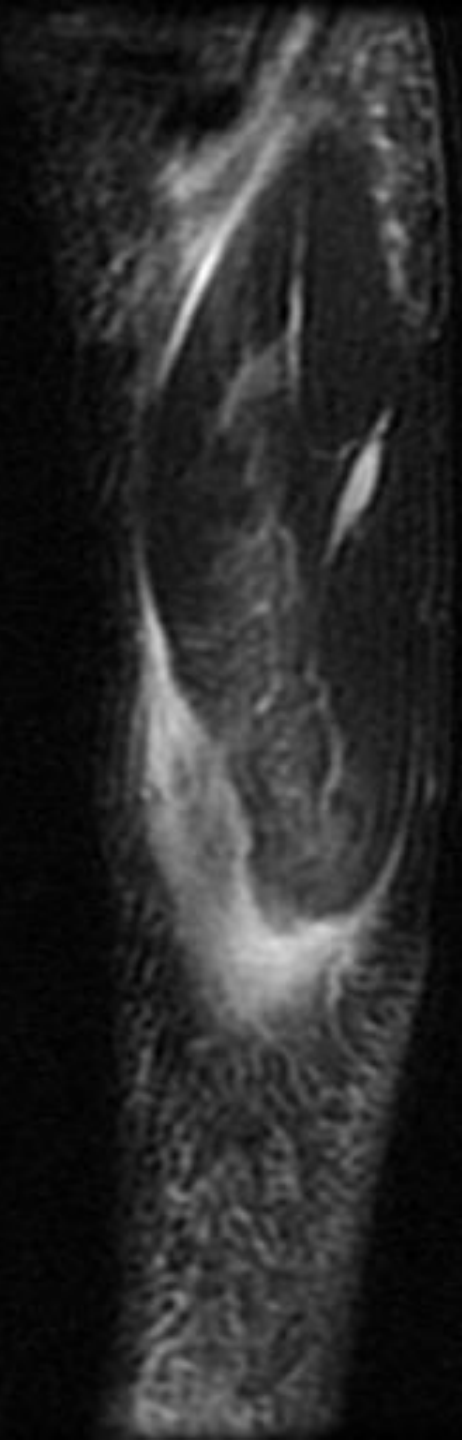
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Lossy Compression 6:1



Lossy Compression 6:1

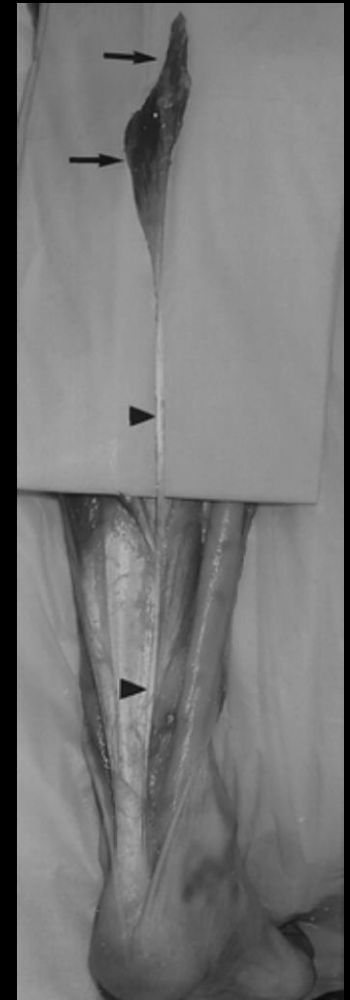
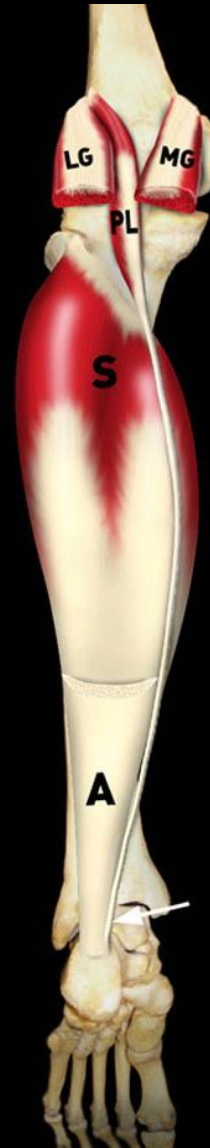


Tennis Leg!

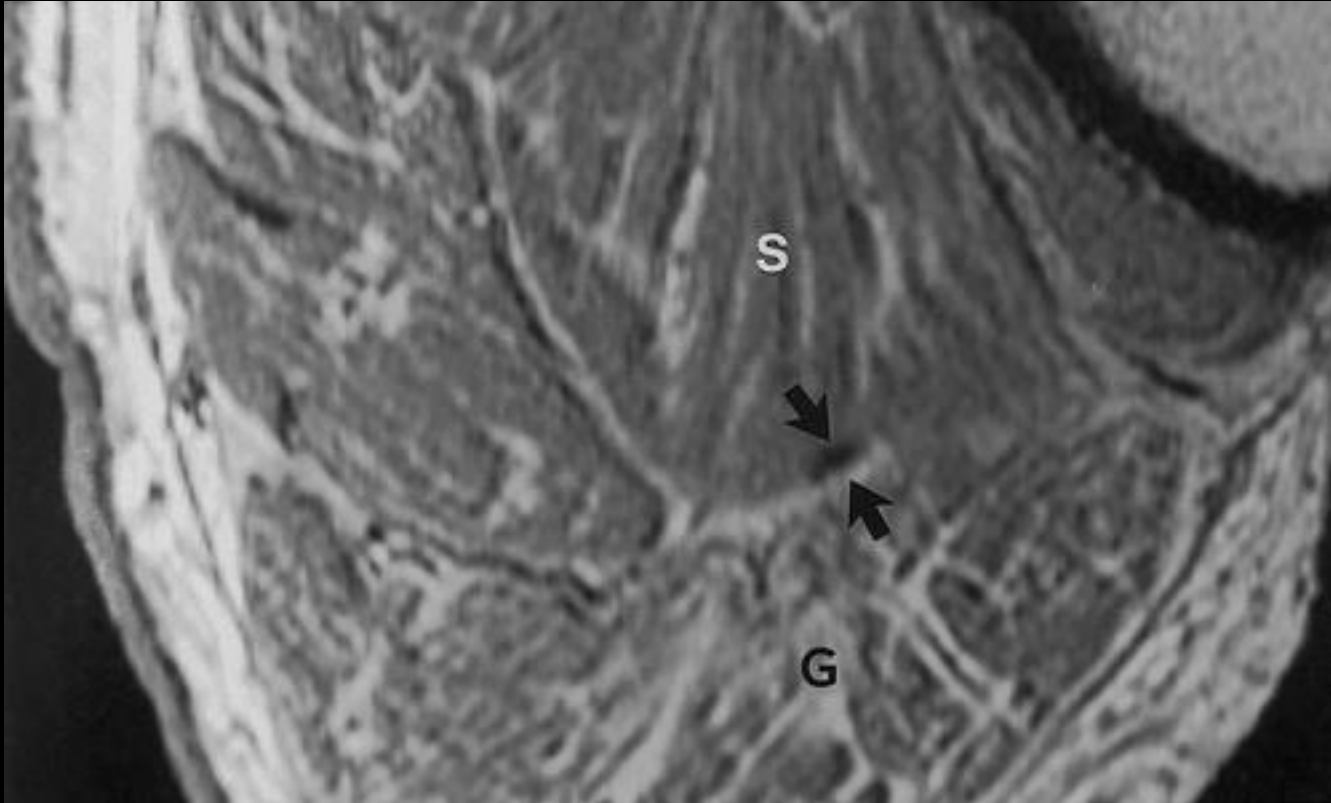
- Complete tear of the proximal tendinous portion of the plantaris with retraction of the hypertrophied tendon
- Low grade strain within the medial head of the gastrocnemius muscle
- Perimuscular edema involving the soleus, popliteus, and gastrocnemius muscles (mostly located between the medial head of gastroc and the soleus)

Relevant Plantaris Anatomy

- Absent in 7% to 10% of the population
- Arises just superior and medial to the lateral head of the gastrocnemius muscle
- Part of the posterolateral compartment of the calf
- Forms the triceps surae muscle, along with the gastrocnemius and soleus muscles

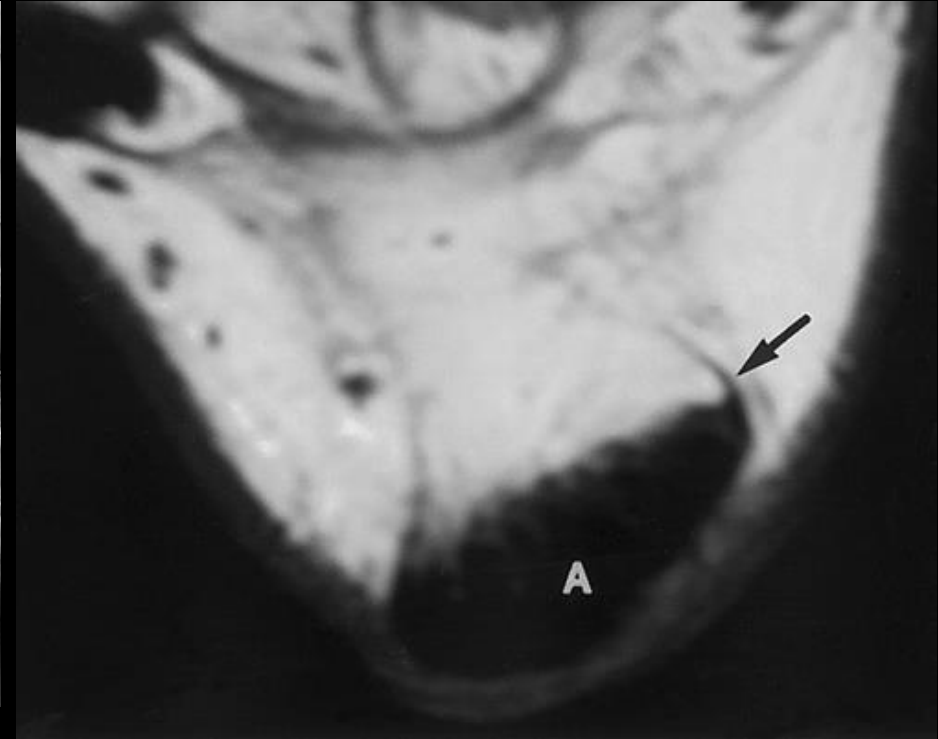
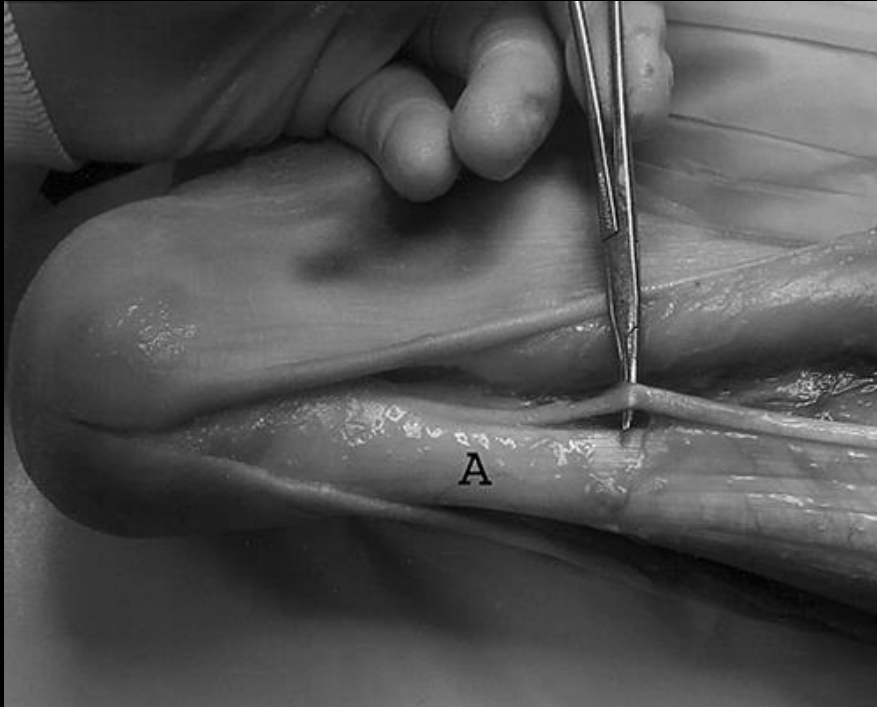


Relevant Anatomy



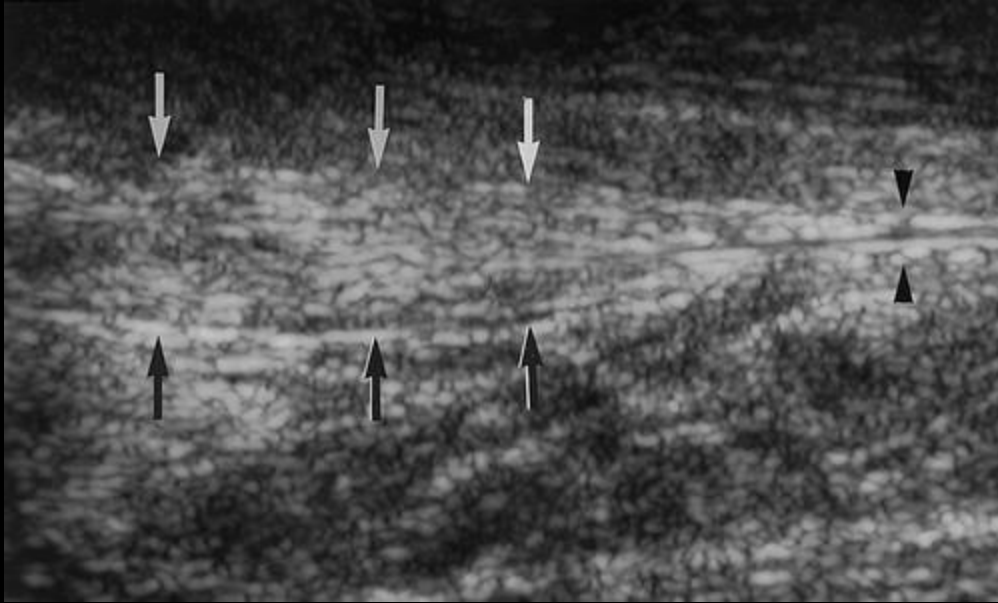
The long thin tendon courses obliquely and medially, lying between the soleus and medial head of the gastrocnemius muscles

Relevant Anatomy

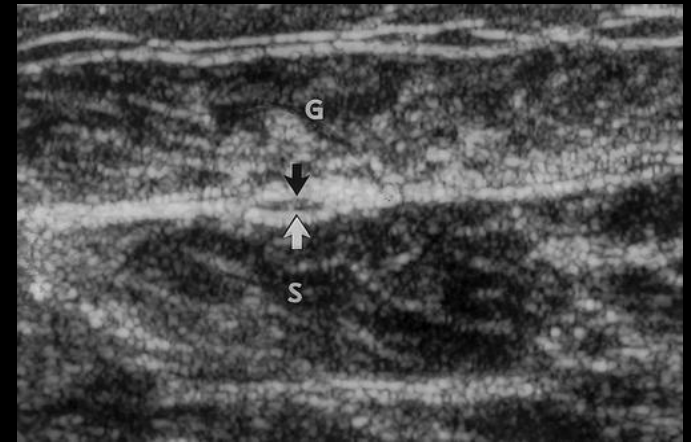
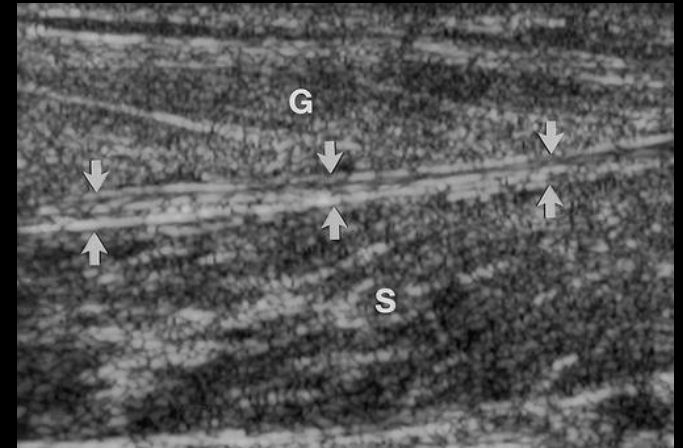


- Distally, the tendon lies near the medial border of the Achilles tendon
- Inserts on the calcaneus just anteromedial to the Achilles tendon or onto the Achilles tendon itself

US Anatomy



Musculotendinous junction of the plantaris
seen on longitudinal US image



Thin plantaris tendon seen on
LG and TV US images

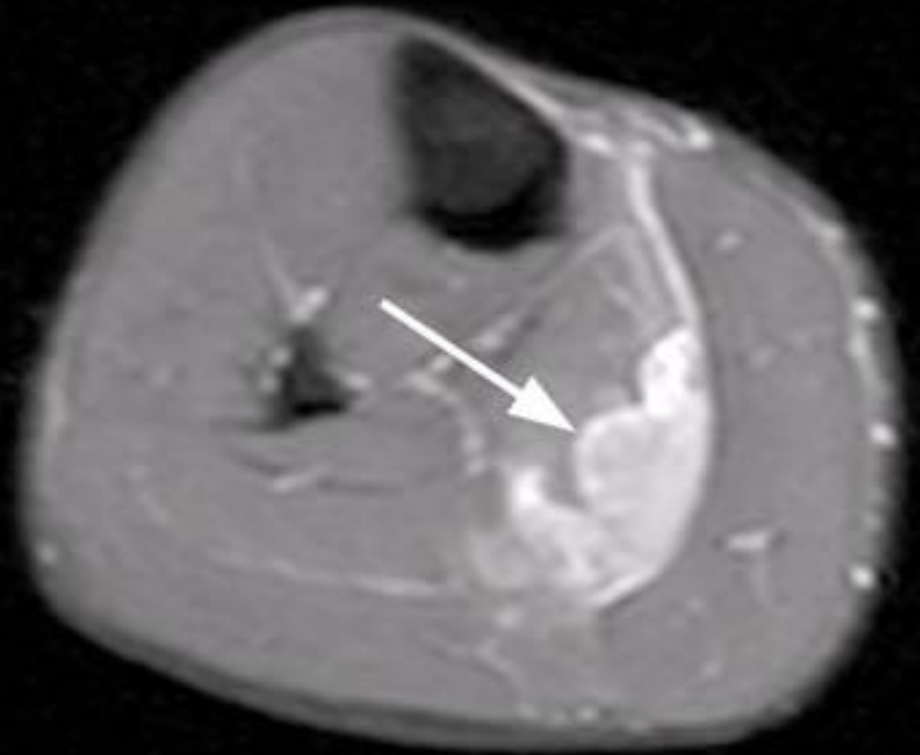
Tennis Leg

- Rupture of the plantaris tendon typically occurs in middle-aged patients
- Mechanism of injury is forced dorsiflexion of the ankle with the knee in extension (e.g. pushing a car)
- The injury may be accompanied by an audible “pop” in the calf.
- Frequently there is a palpable mass, caused by a hematoma
- Term is also used more generally and may refer to a strain of the medial head of the gastrocnemius muscle or the soleus muscle
- Injuries to the medial head of the gastrocnemius muscle are more common than plantaris tendon rupture

Tennis Leg

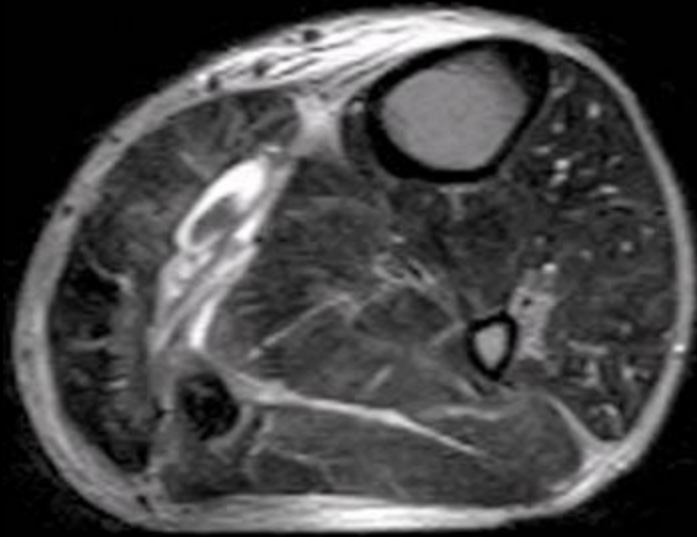


Medial head of the gastrocnemius
partial tear

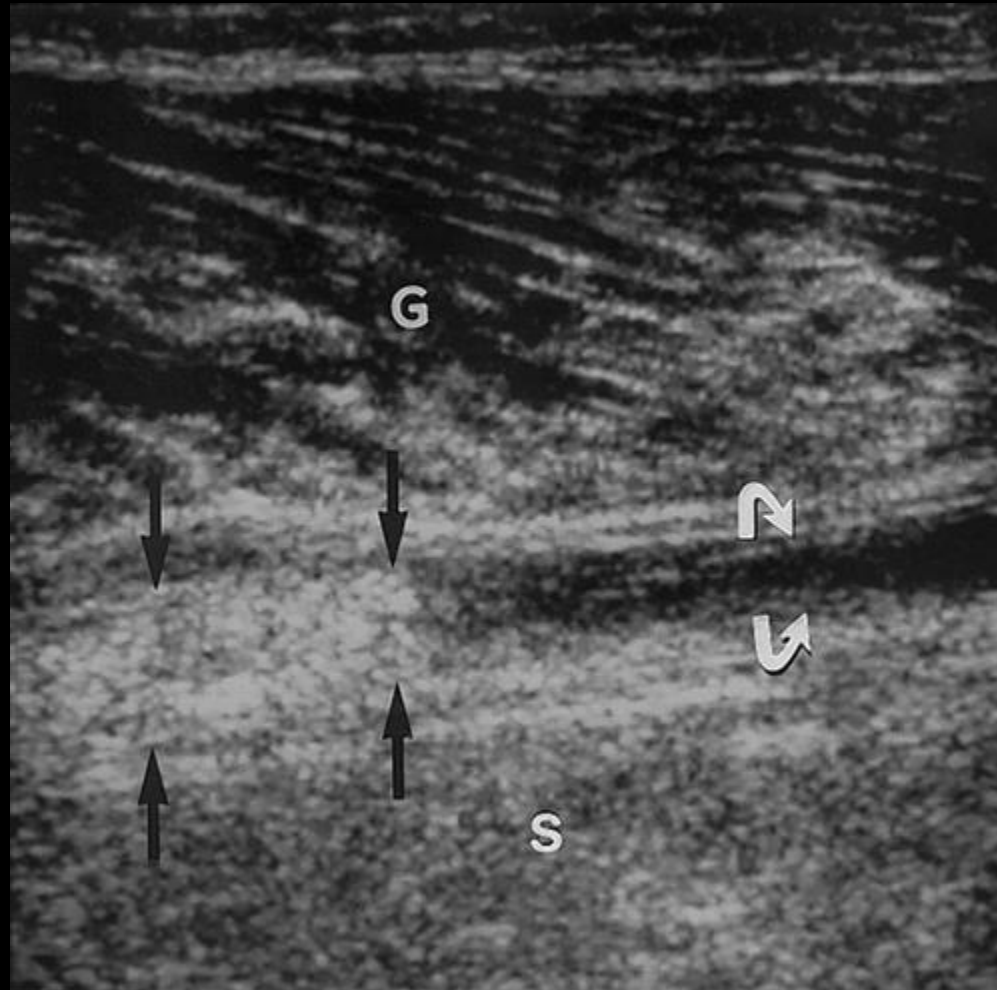


Hemorrhage and edema with a
soleus muscle tear

Companion Cases



Companion Cases



Complete rupture of plantaris tendon on US

References

1. Delgado, Gonzalo J., et al. "Tennis Leg: Clinical US Study of 141 Patients and Anatomic Investigation of Four Cadavers with MR Imaging and US 1." *Radiology* 224.1 (2002): 112-119.
2. Radsourc – Tennis Leg