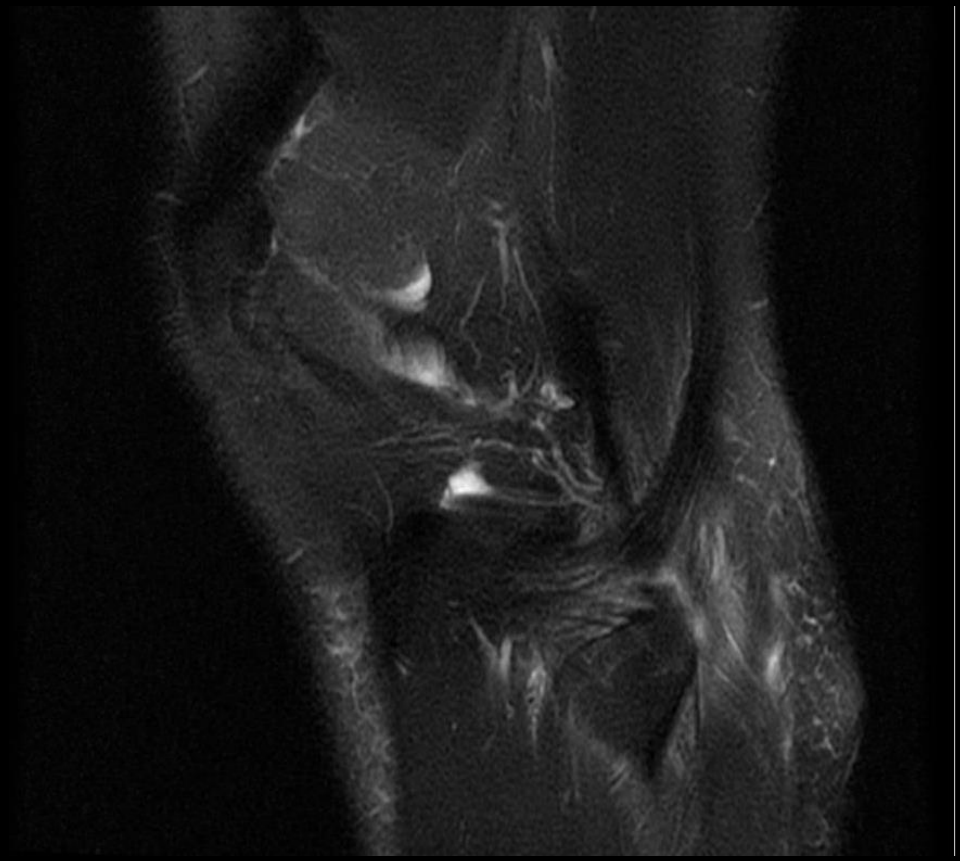
26 year old male athlete with lateral knee pain and injury 2 weeks prior.

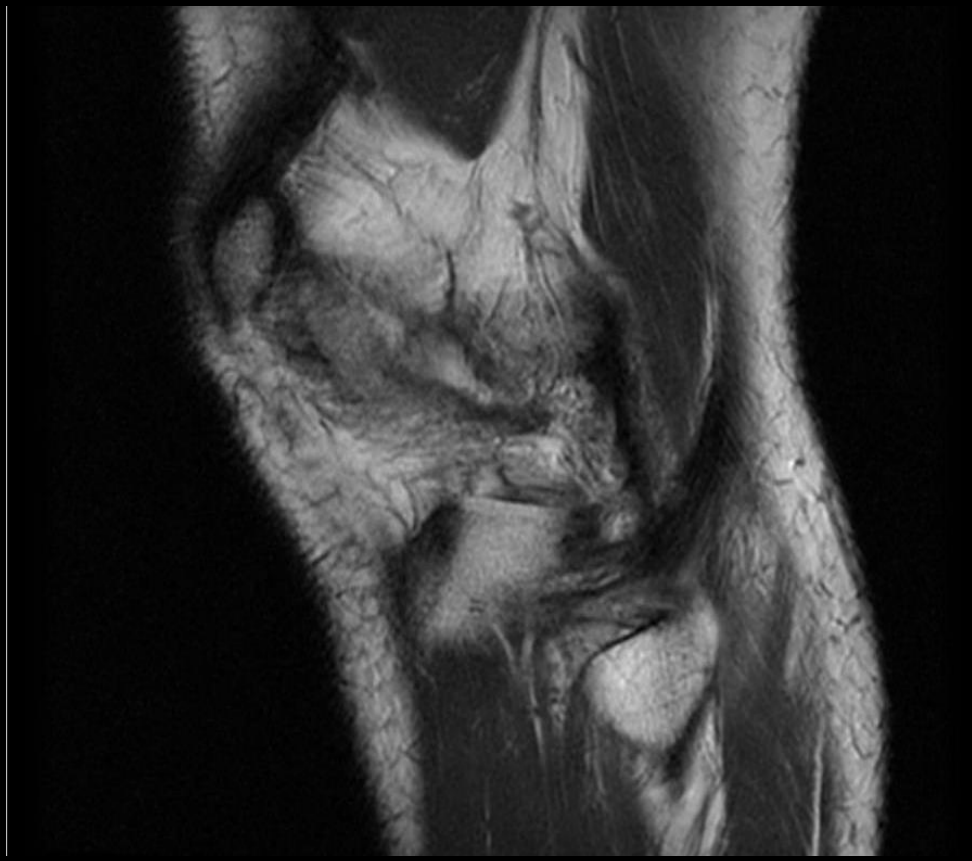

R
SH
STANDING

Initial MRI

12 days later

12 days later





Distal Biceps Femoris Tendon Tear

Anatomy

Long Head:

- **Origin:** Common tendon with semitendinosus from superior medial quadrant of the posterior portion of the ischial tuberosity

Short Head:

- **Origin:** Lateral lip of linea aspera, lateral supracondylar ridge of femur, and lateral intermuscular septum of thigh

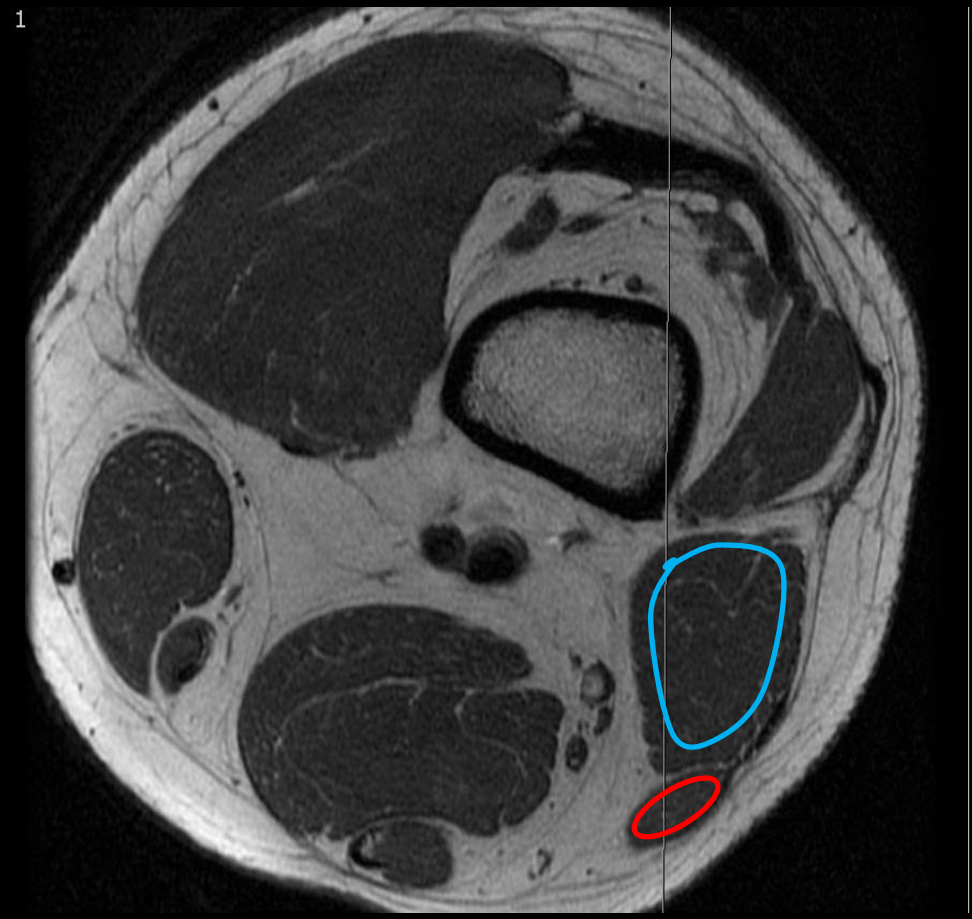
Insertions…

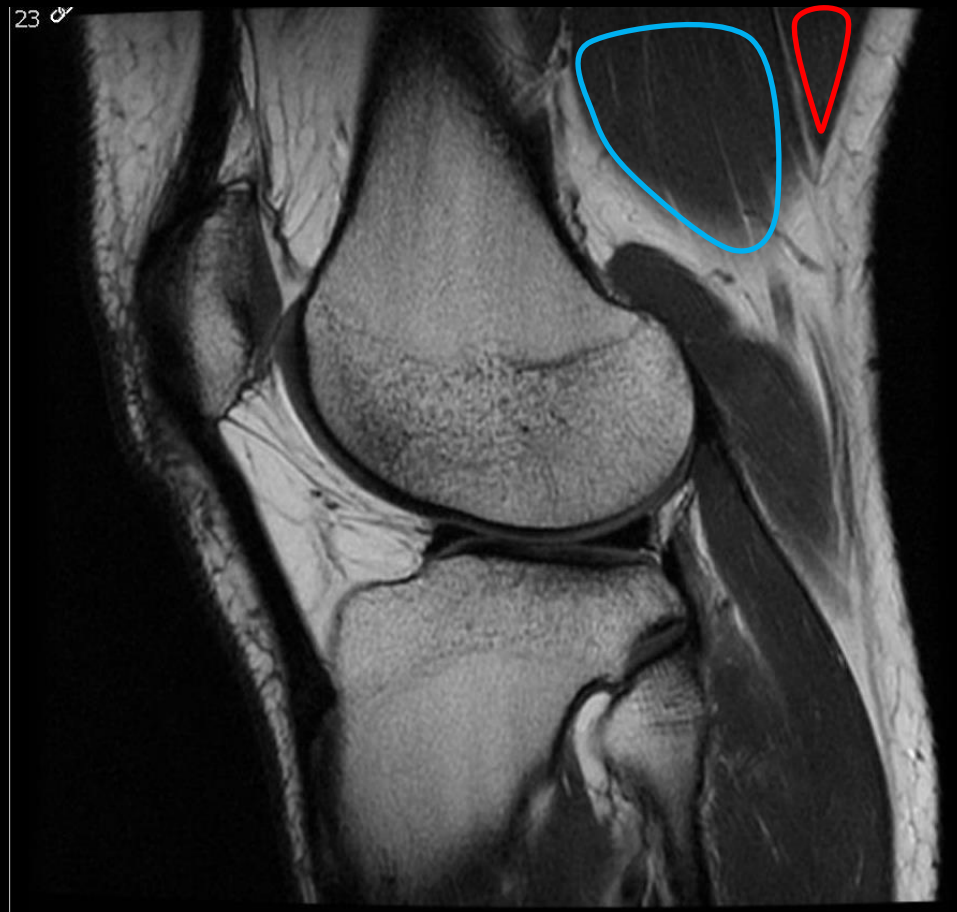
Biceps Femoris – Short and Long Head - UW Department of Radiology. http://rad.washington.edu/muscle-atlas

Anatomy

Reference for images

Anatomy



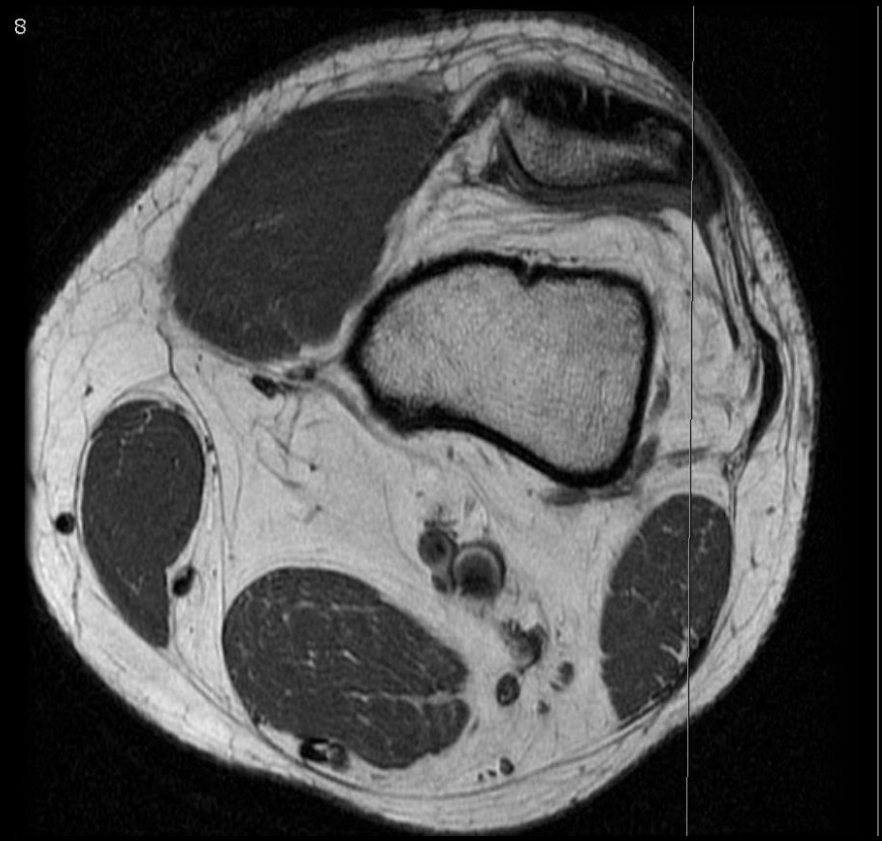


Short Head

Long Head

Reference for images

Anatomy



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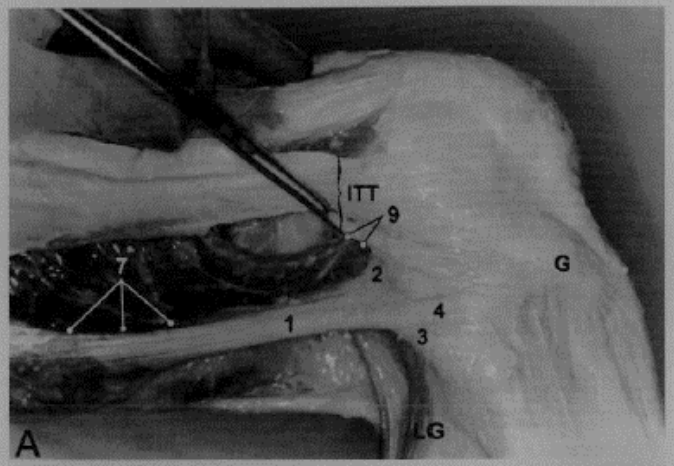


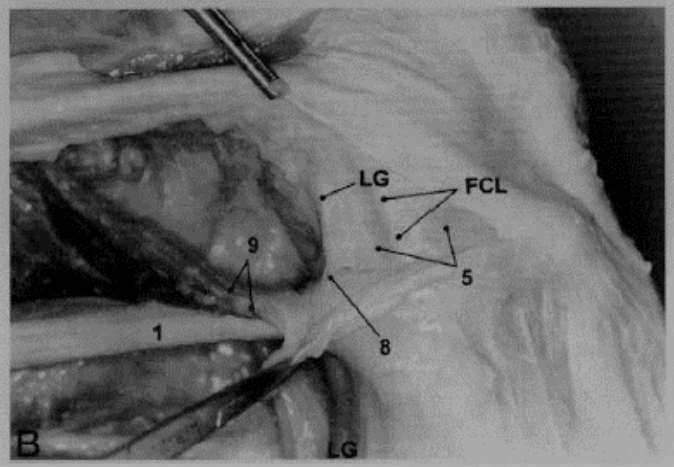
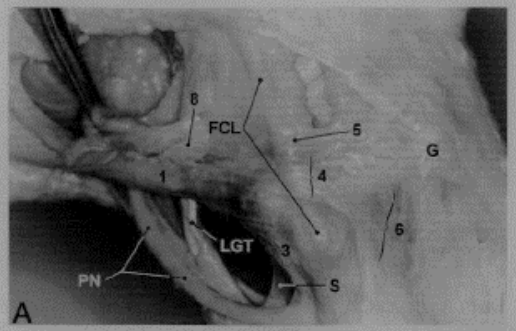
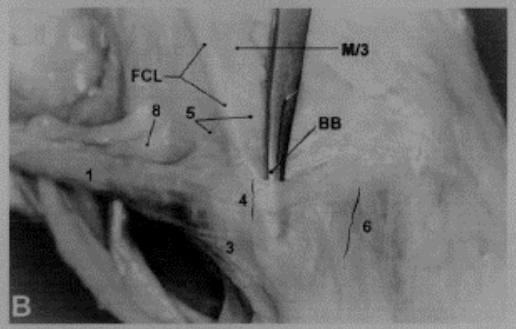


Figure 2. A, lateral aspect of the right knee with superficial fascia removed. Components of the long head of the biceps femoris muscle included the proximal tendon (1), reflected arm (2), direct arm (3), and anterior arm (4). Components of the short head of the biceps femoris muscle included the muscular attachment of short biceps to long head's tendon (7), and biceps-capsuloosseous iliotibial tract confluens (9). LG, lateral gastrocnemius muscle; ITT, iliotibial tract; G, Gerdy's tubercle. B, With the capsuloosseous layer reflected, components of the long head of the biceps femoris muscle included the proximal tendon (1) and lateral aponeurosis (5). Short head components visible were the capsular arm (8) and biceps-capsuloosseous iliotibial tract confluens (9). LG, lateral gastrocnemius muscle; FCL, fibular collateral ligament.





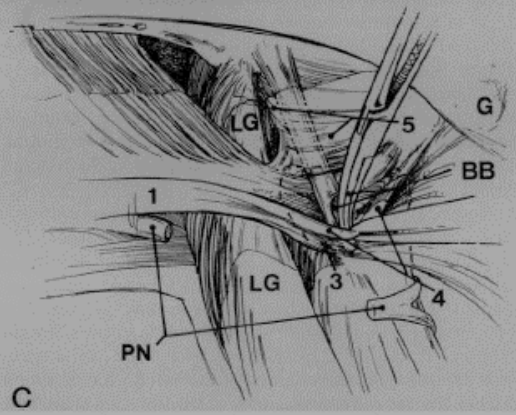
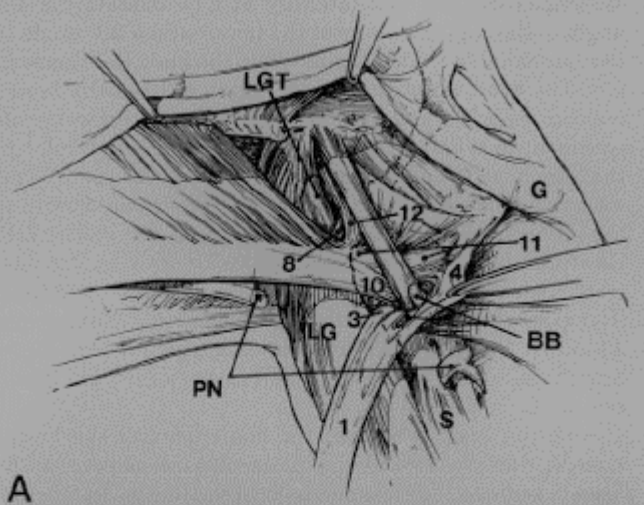


Figure 3. A, lateral aspect of the right knee with posterior iliotibial tract, biceps-capsuloosseous iliotibial tract confluens, and reflected arm of the long head of the biceps femoris muscle removed. Components of the long head of the biceps femoris muscle that were visible included the proximal tendon (1), direct arm (3), anterior arm (4), lateral aponeurosis (5), and anterior aponeurosis (6). FCL, fibular collateral ligament; G, Gerdy's tubercle; S, soleus muscle; LGT, lateral gastrocnemius tendon; PN, peroneal nerve. Component of the short head of the biceps femoris muscle was the capsular arm (8). B, visible components of the long head of the biceps femoris muscle were the direct arm (3), anterior arm (4), lateral aponeurosis (5), and anterior aponeurosis (6). FCL, fibular collateral ligament; M/3, mid-third lateral capsu-



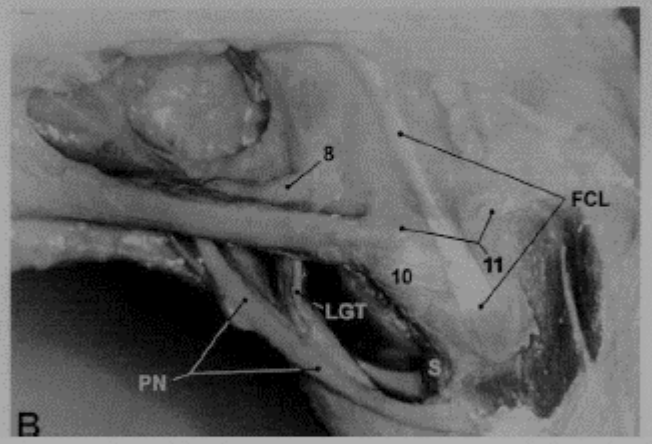


Figure 4. Lateral aspect of the right knee. A, anatomic drawing of short head of biceps femoris muscle. Long head components—proximal tendon (1), direct arm (3), and anterior arm (4)—are retracted. Components of the short head of the biceps femoris muscle visible here were the capsular arm (8), direct arm (10), anterior arm (11), and lateral aponeurosis (12). LGT, lateral gastrocnemius tendon; G, Gerdy's tubercle; BB, bicipital bursa; S, soleus muscle; LG, lateral gastrocnemius muscle; PN, peroneal nerve. B, deep and capsuloosseous layers of the iliotibial tract with long head of the biceps femoris muscle removed. Short head of the biceps femoris muscle's capsular arm (8), direct arm (10), and anterior arm (11). FCL, fibular collateral ligament; S, soleus muscle; LGT, lateral gastrocnemius tendon; PN, peroneal nerve.

Posterolateral Corner Structures by Layer

Layer I

- Iliotibial tract, biceps femoris

Layer II

- Patellar retinaculum, patellofemoral ligament

Layer III

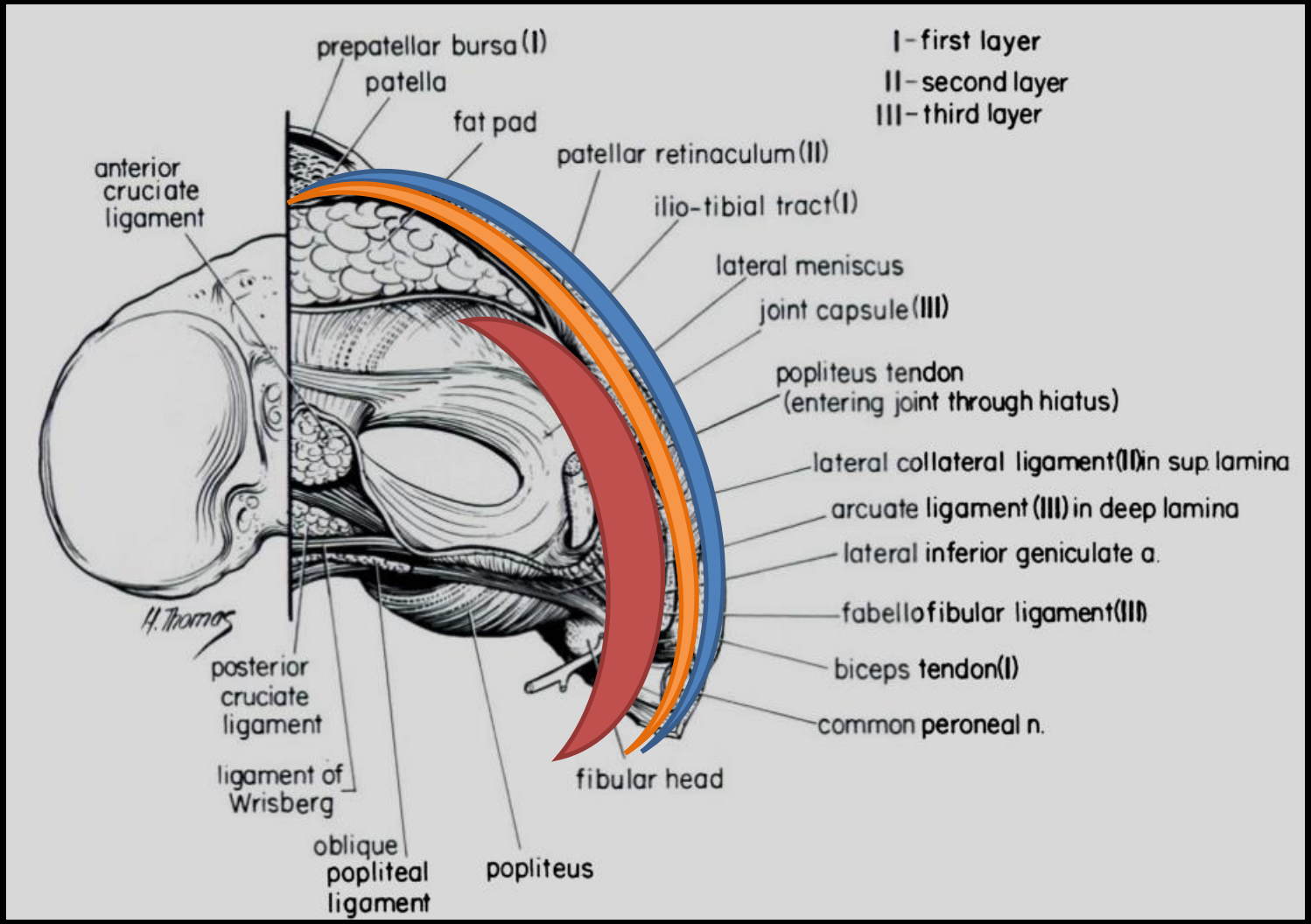
- Superficial: LCL, fabellofibular ligament
- Deep: Arcuate ligament, coronary ligament, popliteus tendon, popliteofibular ligament, capsule

*common peroneal nerve lies between layer I and II

*lateral geniculate artery lies between deep and superficial layer of layer III

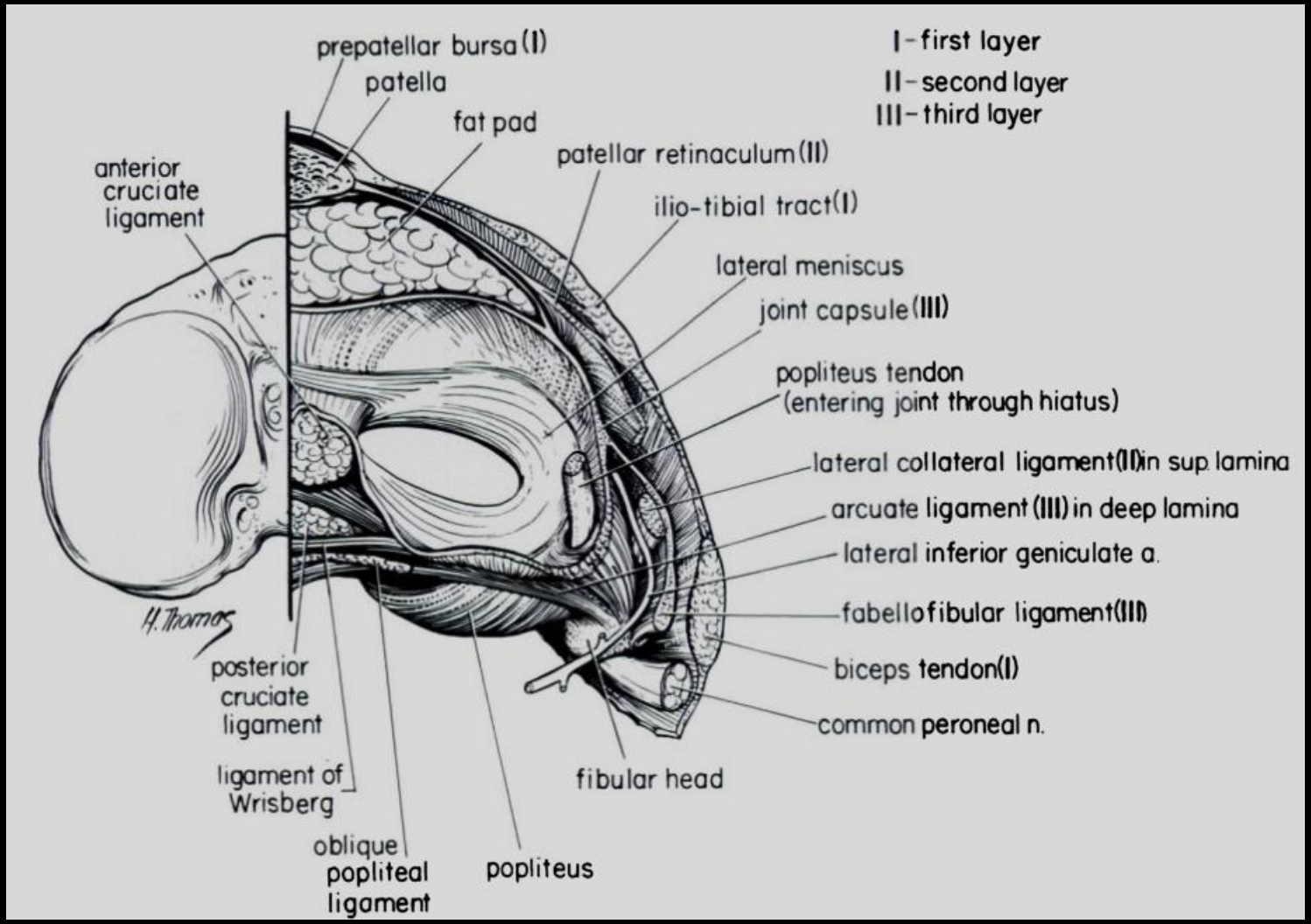
Seebacher JR, Inglis a E, Marshall JL, Warren RF. The structure of the posterolateral aspect of the knee. *J Bone Joint Surg Am*. 1982

Lateral Structures by Layer



Seebacher JR, Inglis a E, Marshall JL, Warren RF. The structure of the posterolateral aspect of the knee. *J Bone Joint Surg Am*. 1982

Lateral Structures by Layer



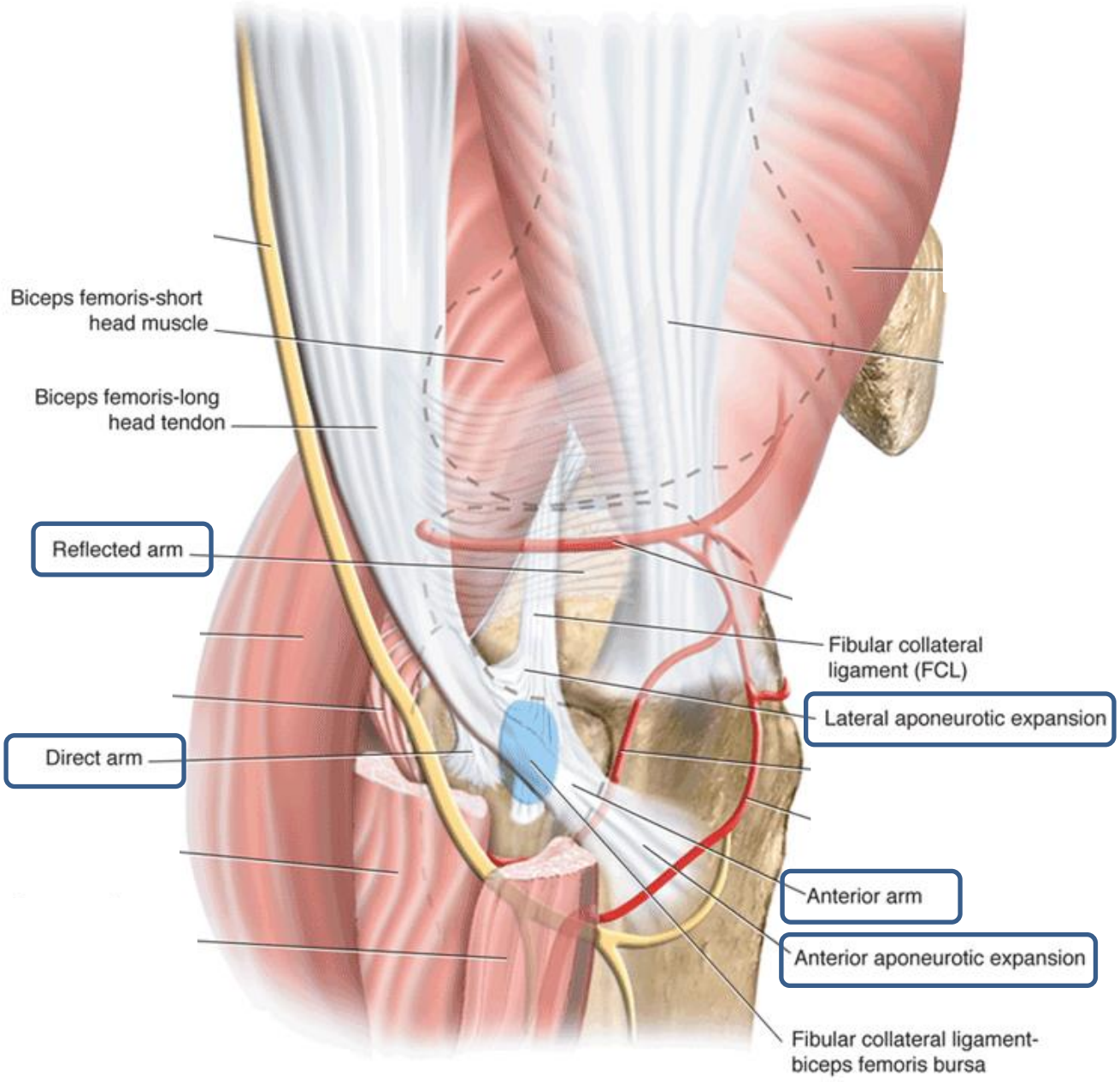
Seebacher JR, Inglis a E, Marshall JL, Warren RF. The structure of the posterolateral aspect of the knee. *J Bone Joint Surg Am*. 1982

Components of the biceps femoris muscle complex

- The superficial fascial layer
- Long head: 1) Reflected arm of the long head of the biceps femoris muscle, 2) direct arm, 3) aponeurotic expansion and 4) anterior arm
- Short head: 1) Attachment to the long head, 1) biceps-capsuloosseous iliotibial tract confluens, 3) capsular attachment, 4) direct arm, 5) aponeurotic expansion, 6) and anterior arm
- The bicipital bursa.

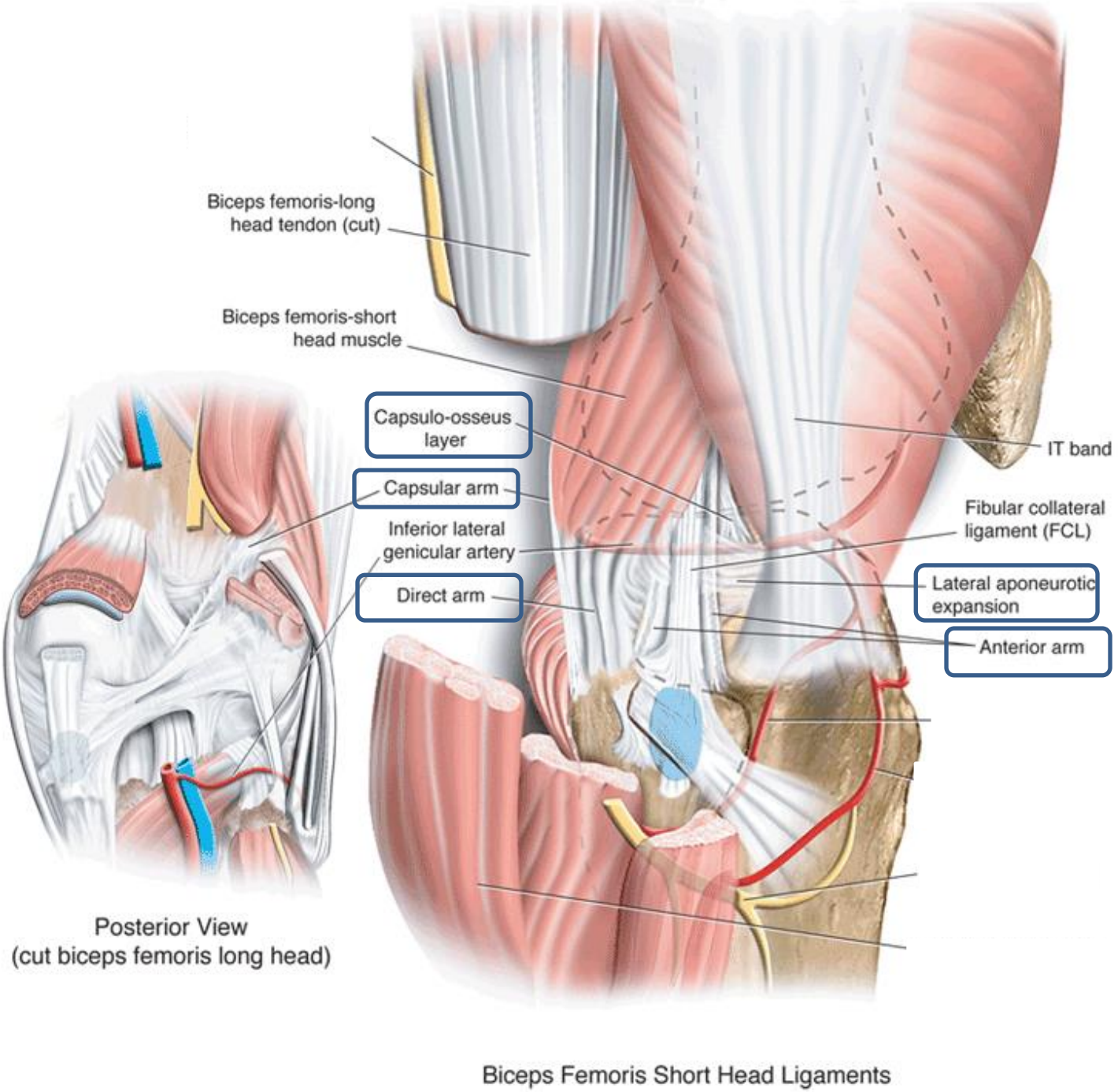
Reference for images

KNEEguru http://www.kneeguru.co.uk/KNEEnotes/courses/posterolateral-corner-injuries-knee-course-frank-noyes-md/relationship-biceps-femoris.

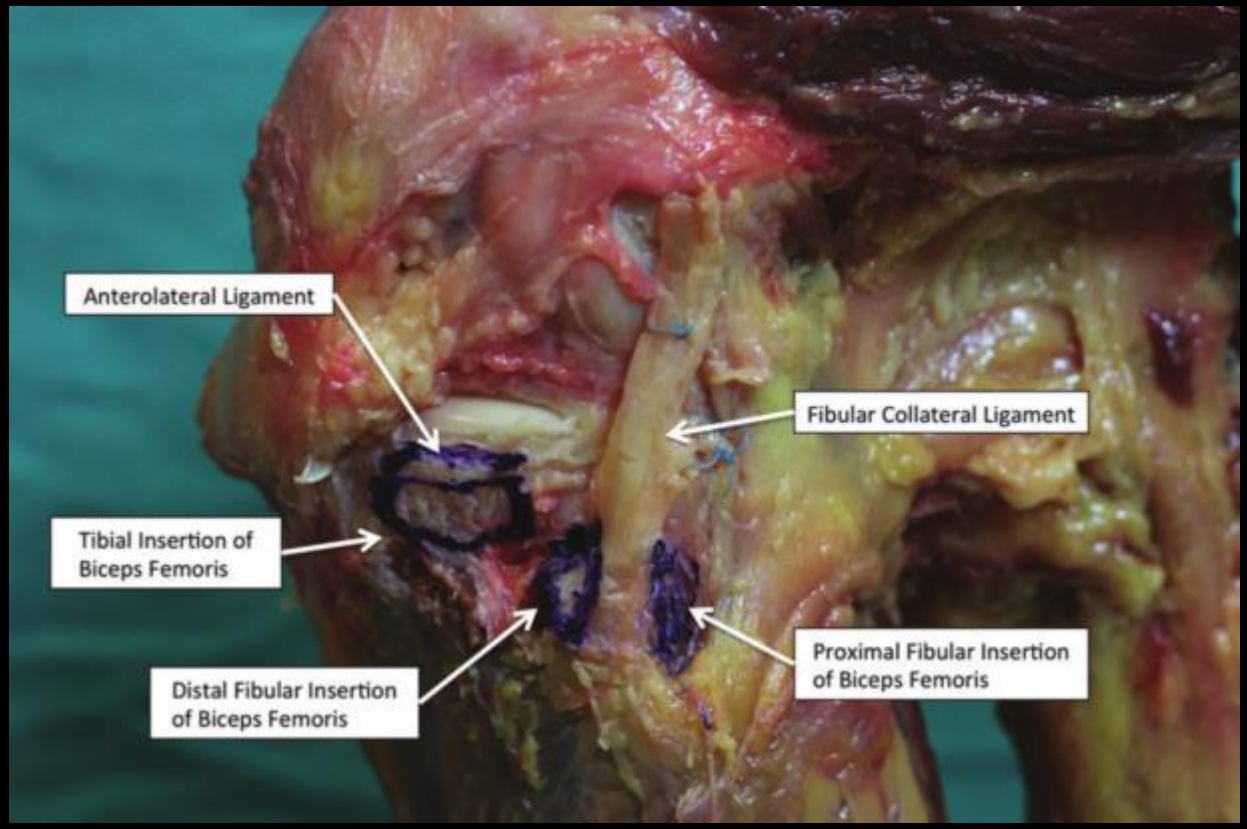


Biceps Femoris Long Head Ligaments

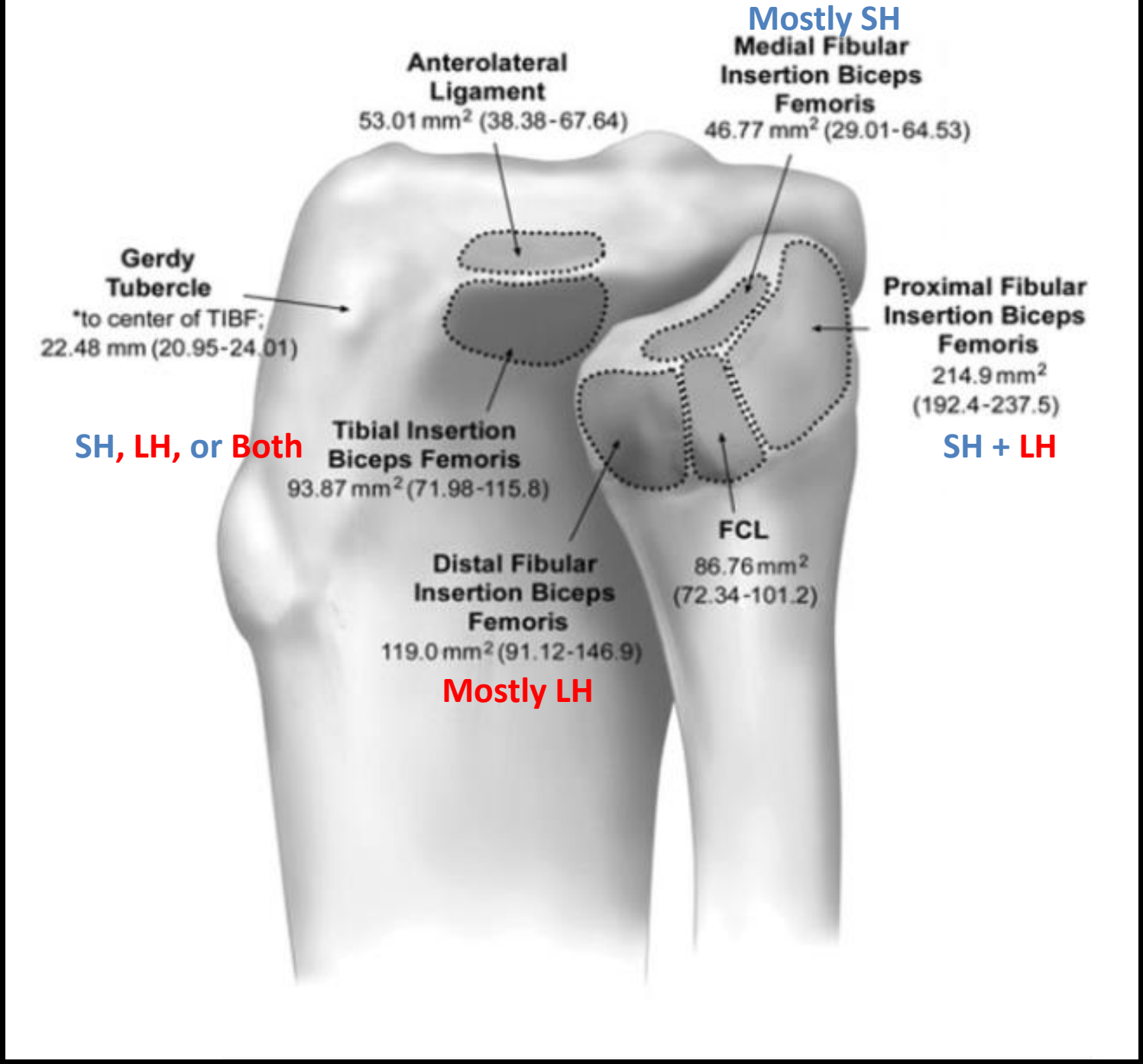
KNEEguru. http://www.kneeguru.co.uk/KNEEnotes/courses/posterolateral-corner-injuries-knee-course-frank-noyes-md/biceps-femoris-relation.



Distal Insertions



Branch EA, Anz AW. Distal Insertions of the Biceps Femoris: A Quantitative Analysis. *Orthop J Sport Med*. 2015;3(9):23-25.



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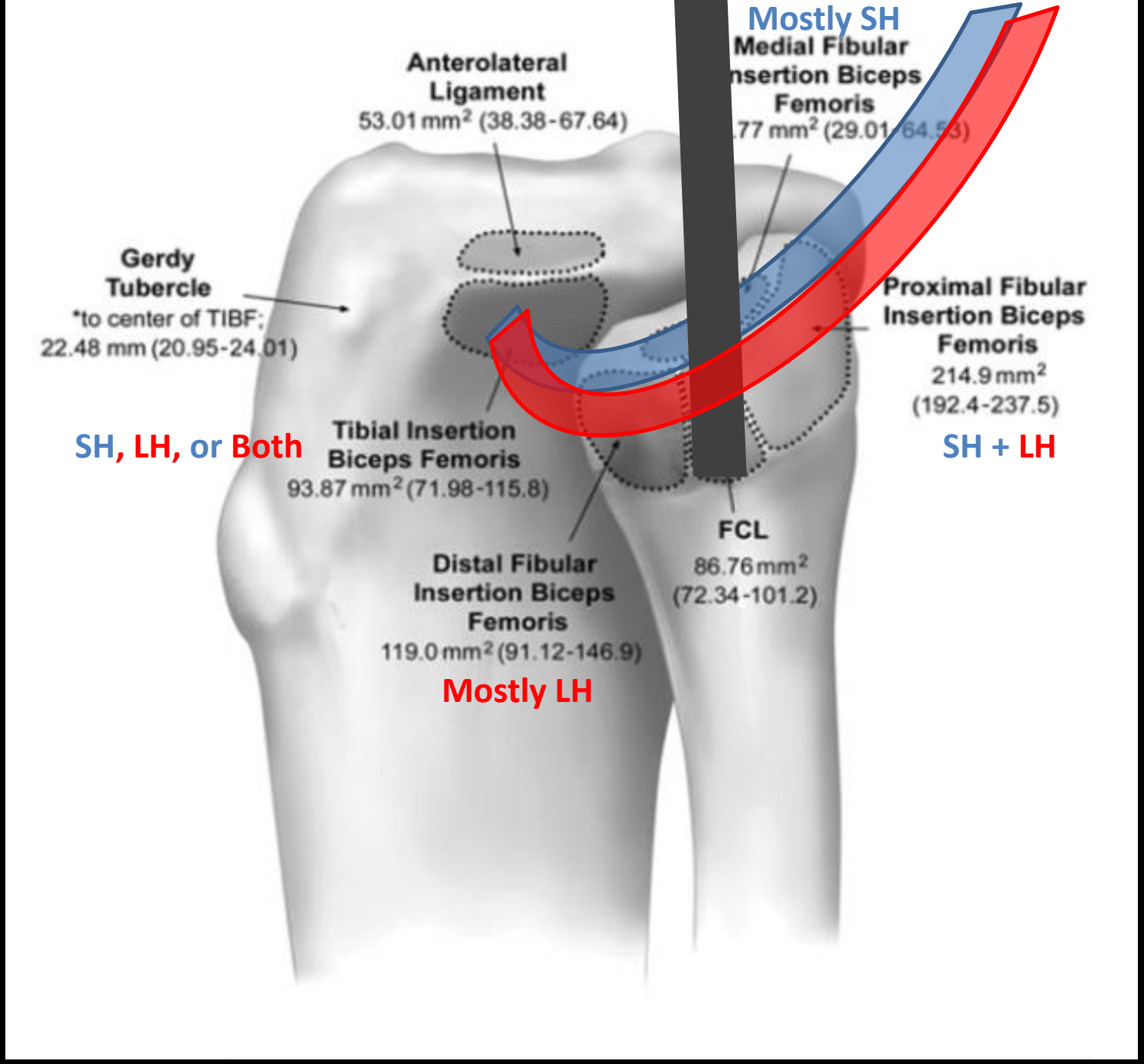

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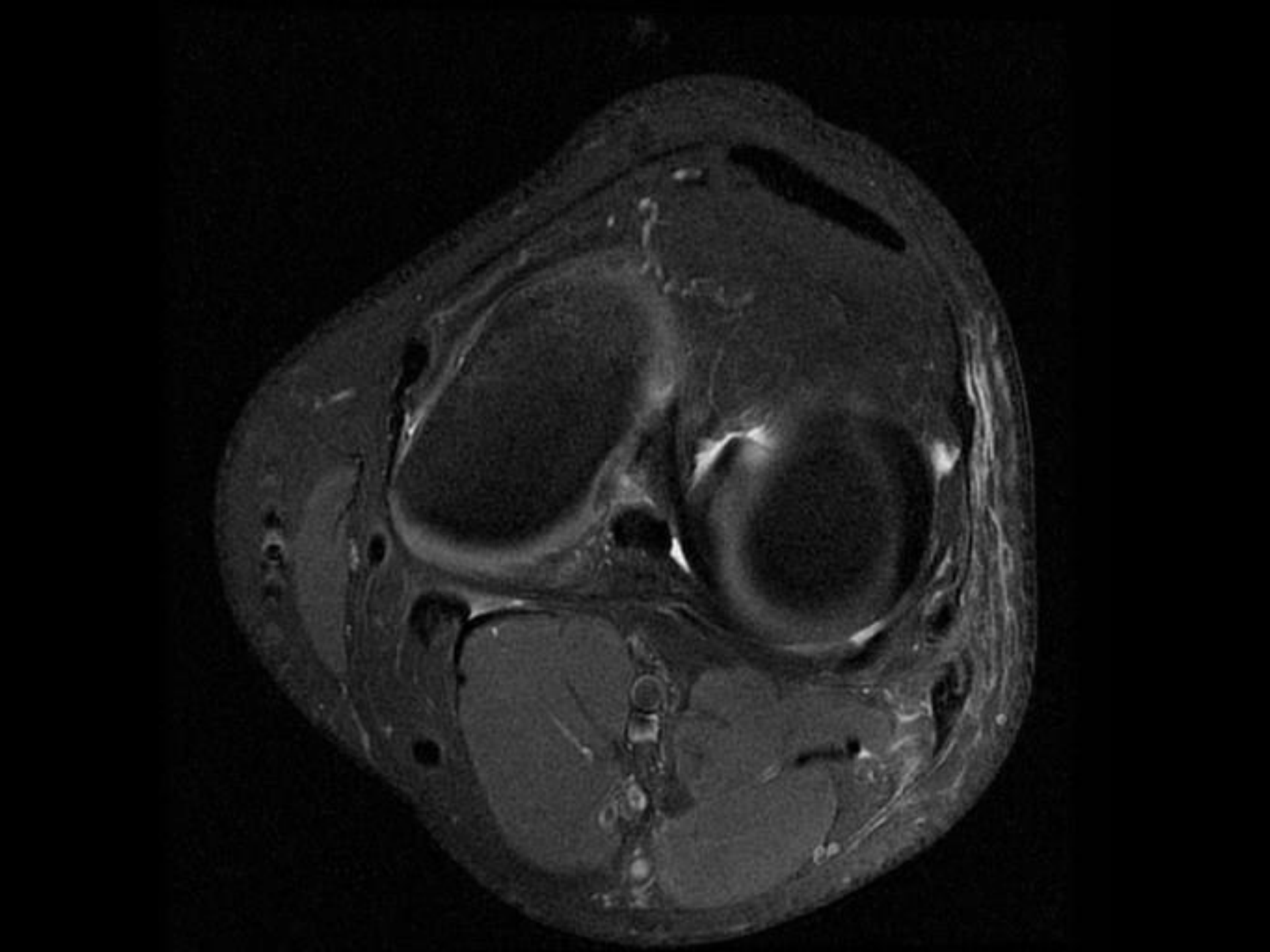

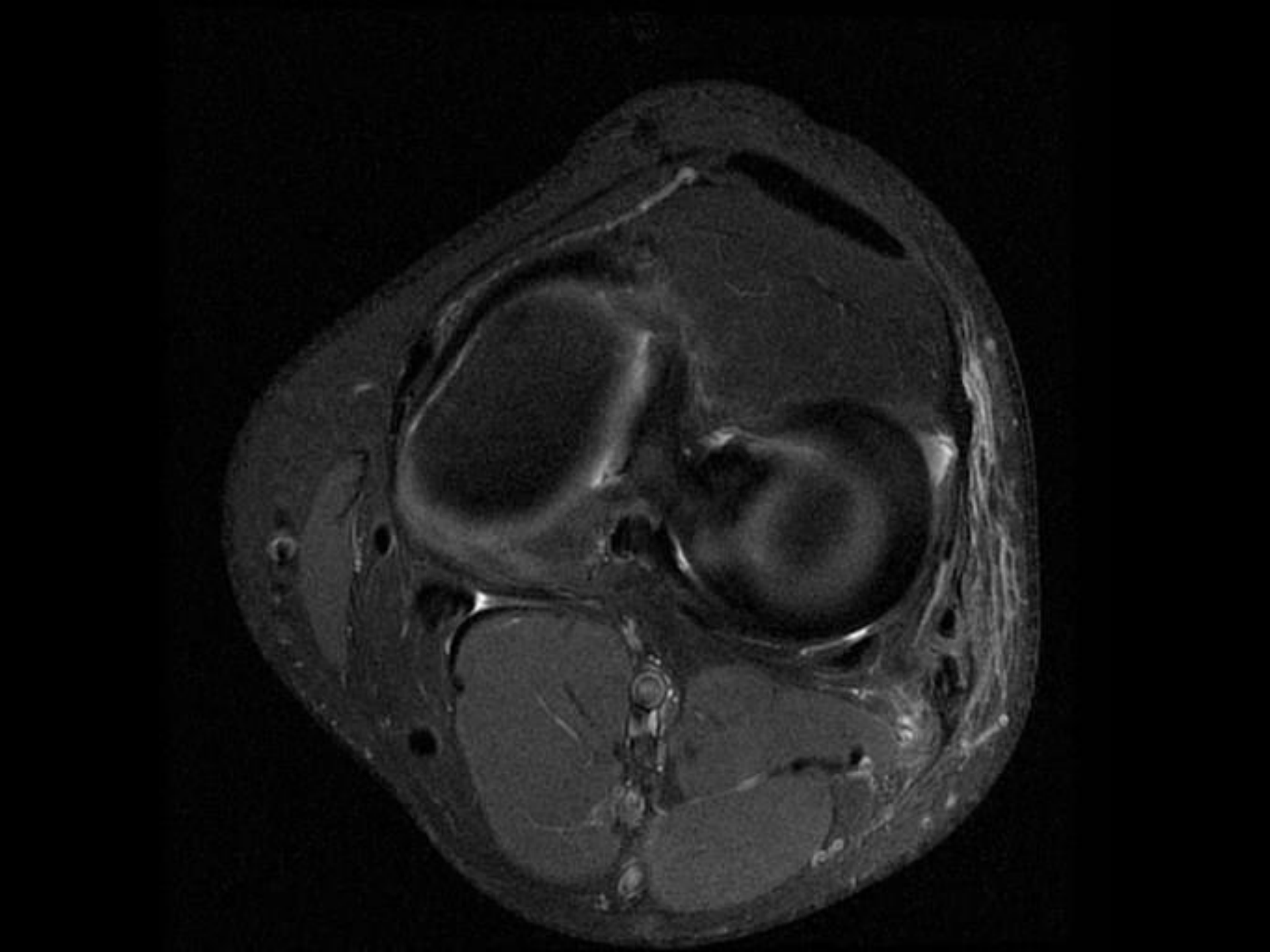

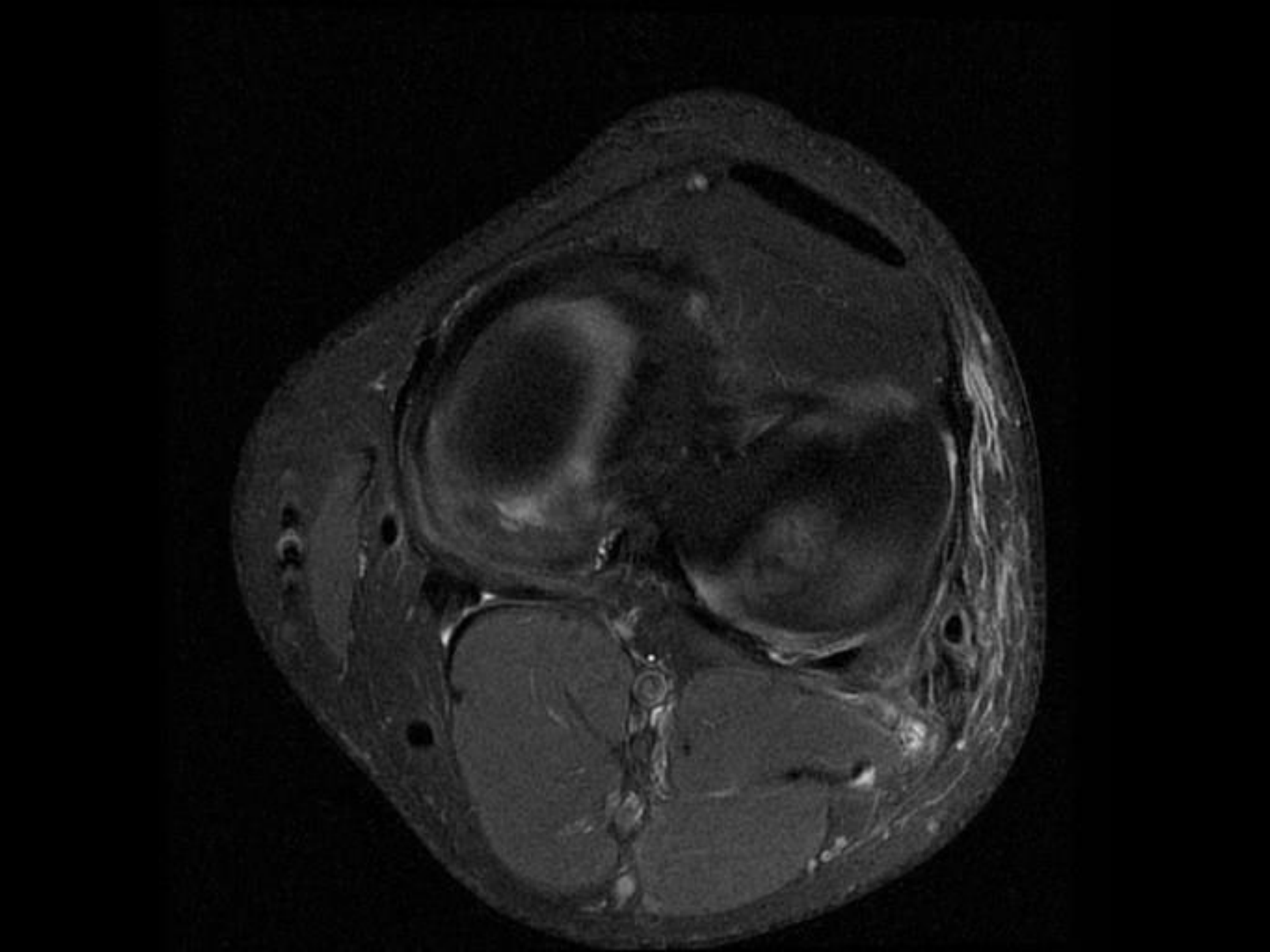

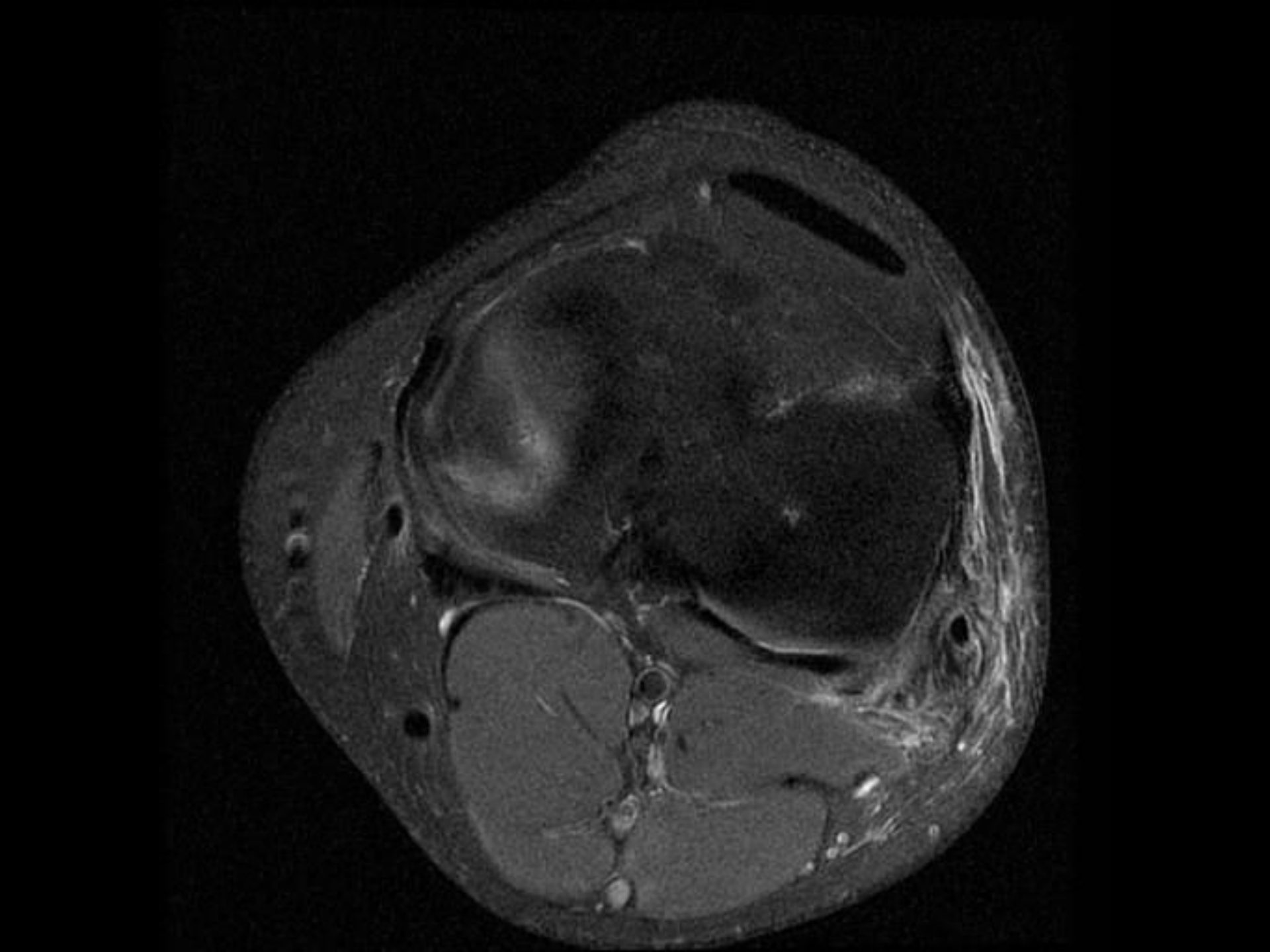

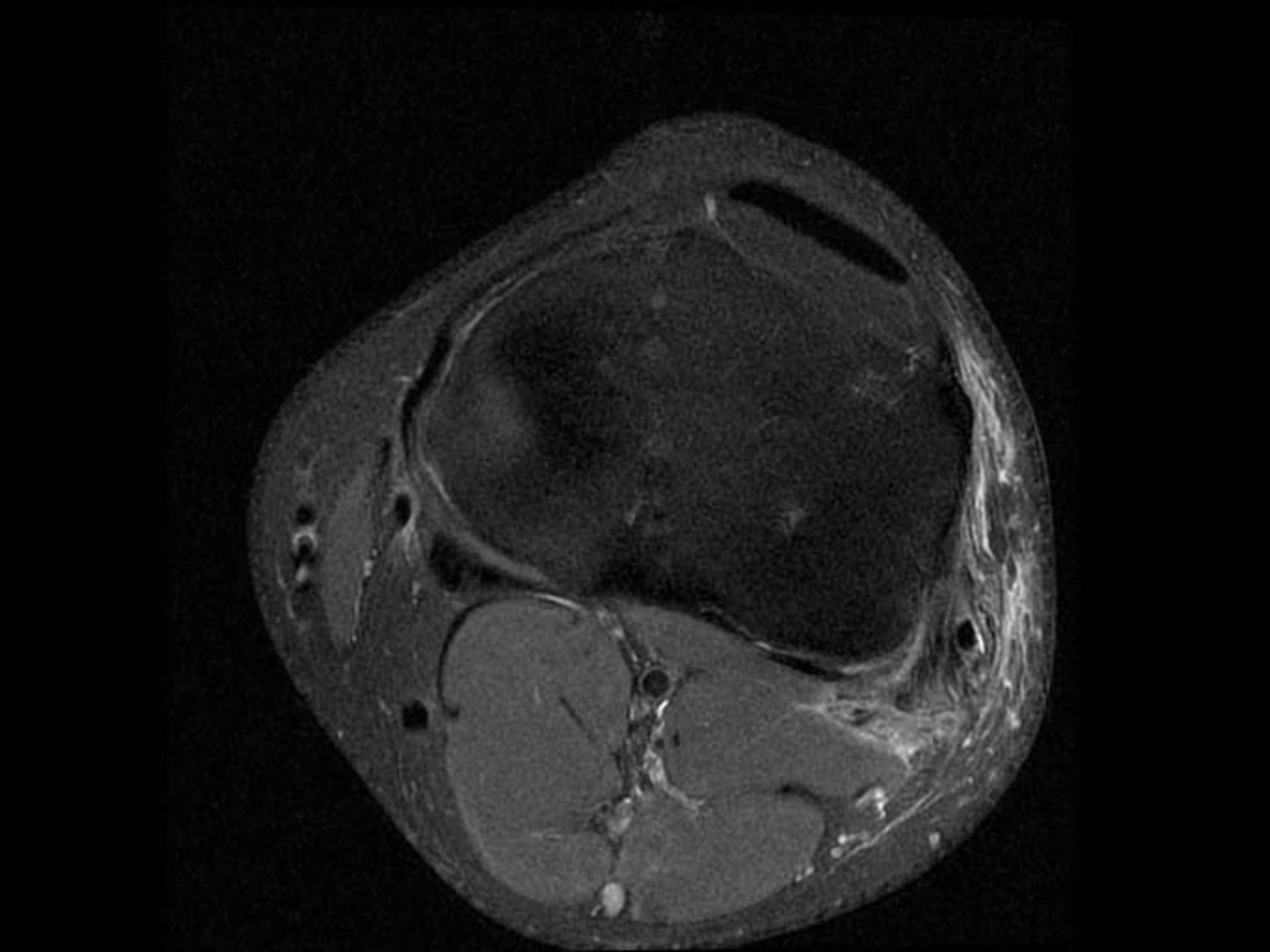

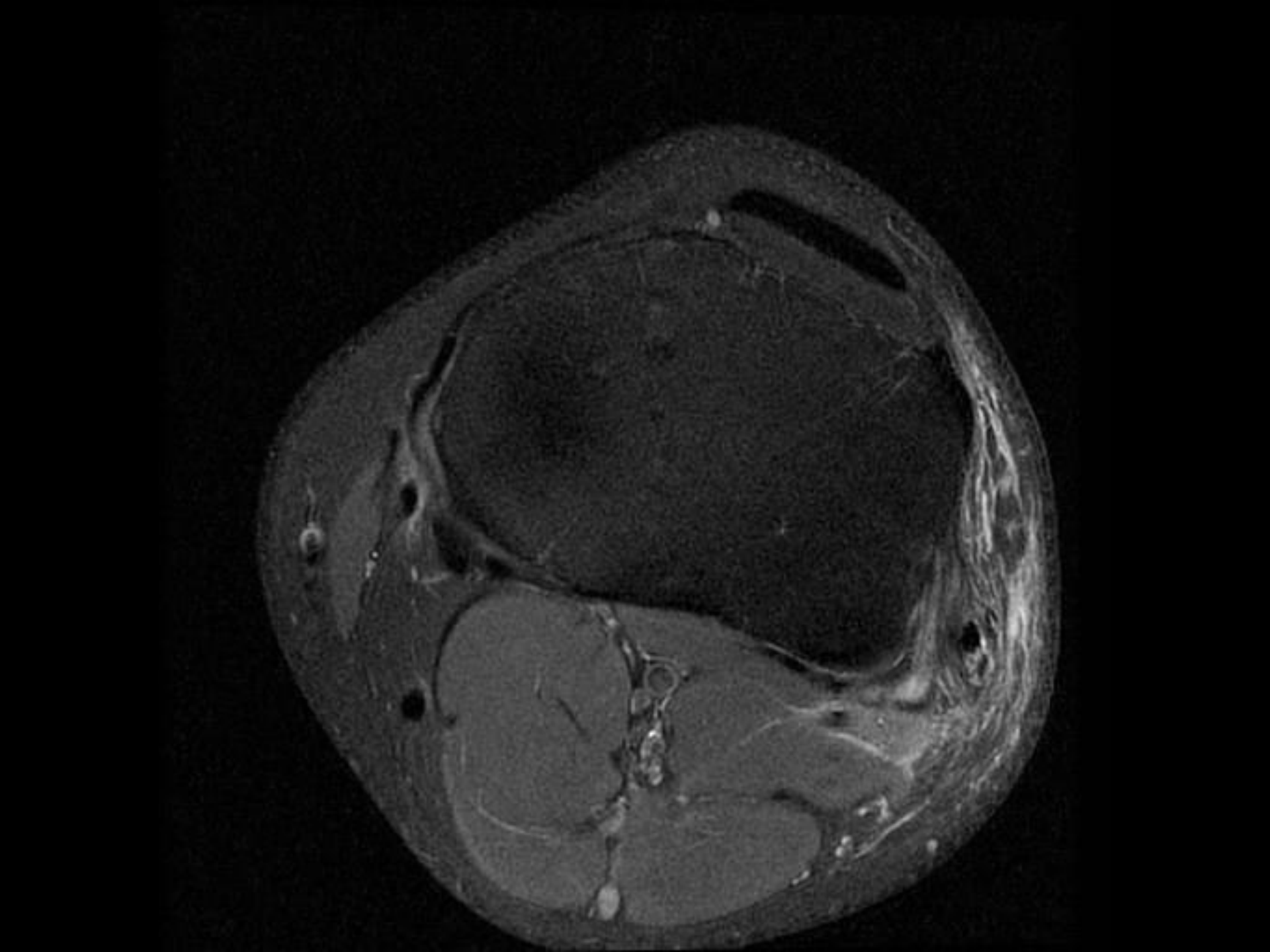

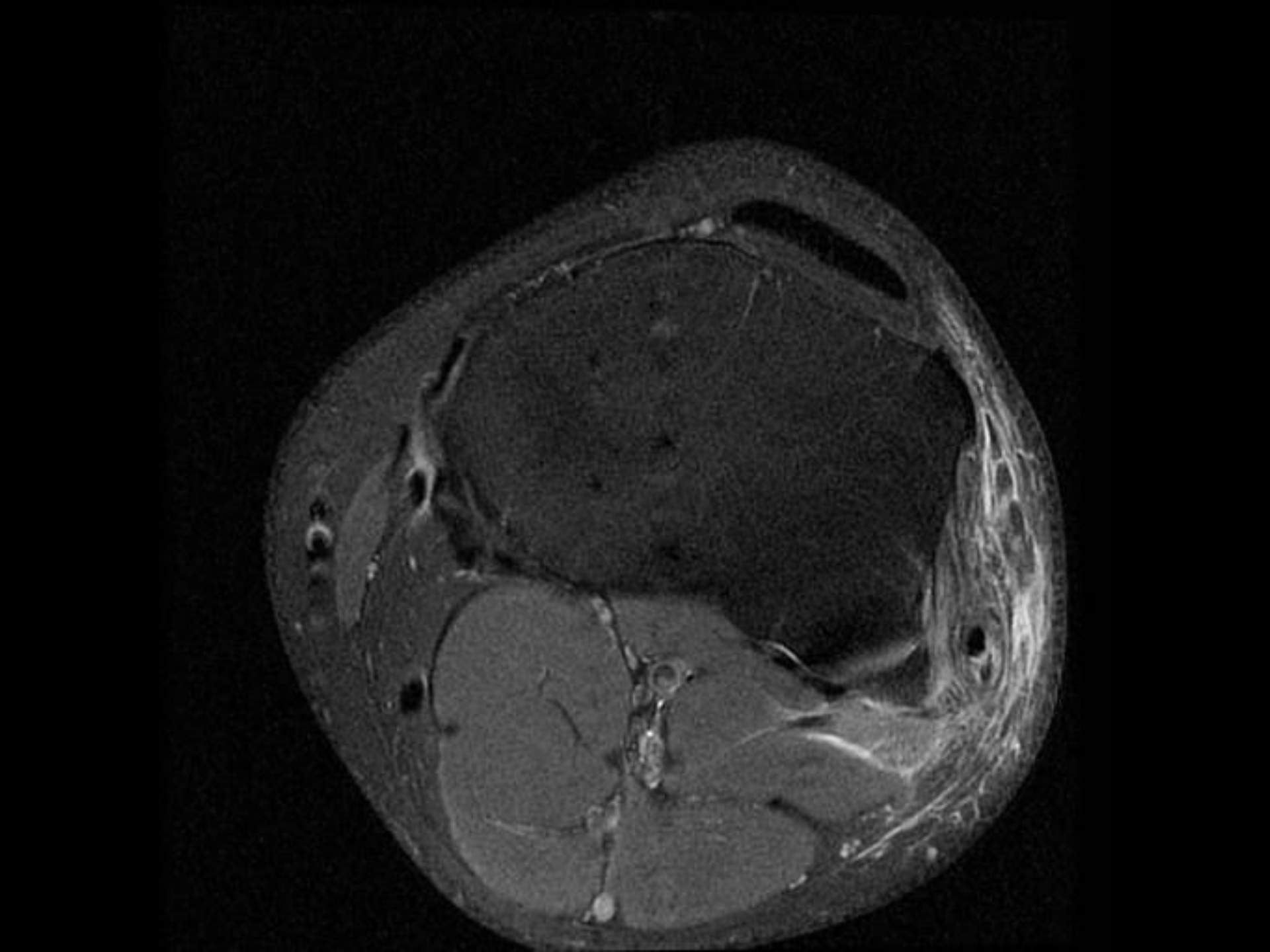

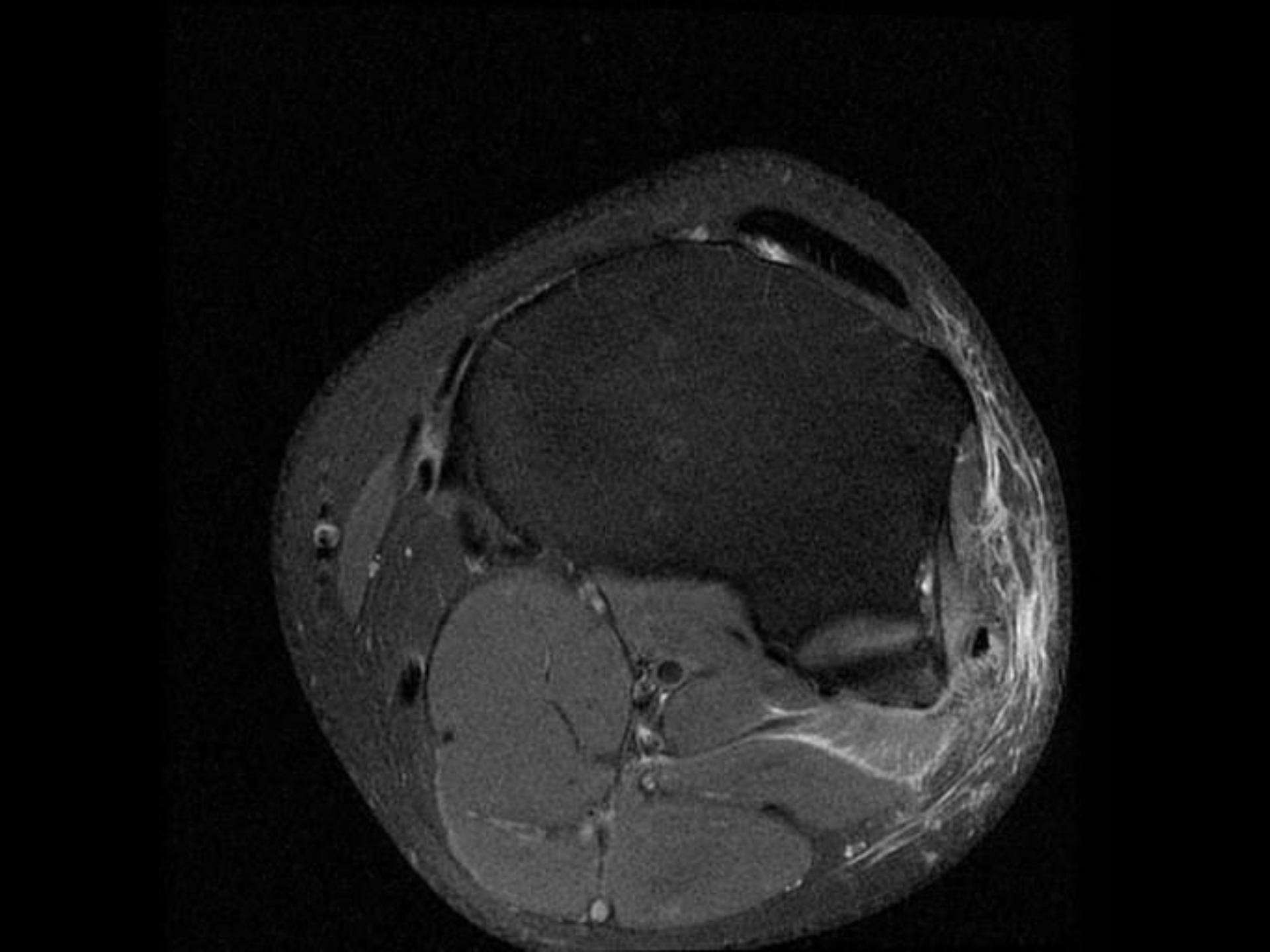

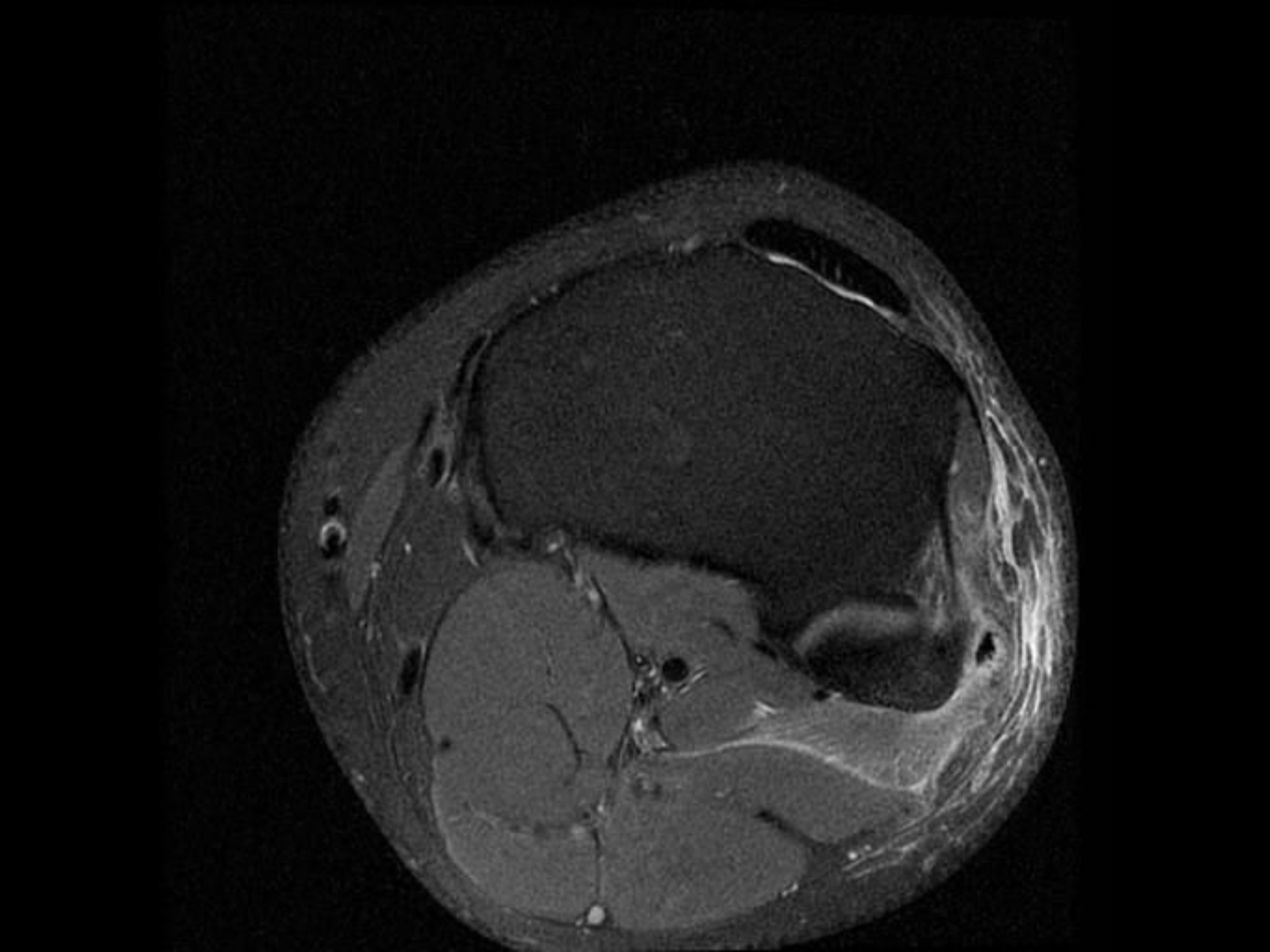

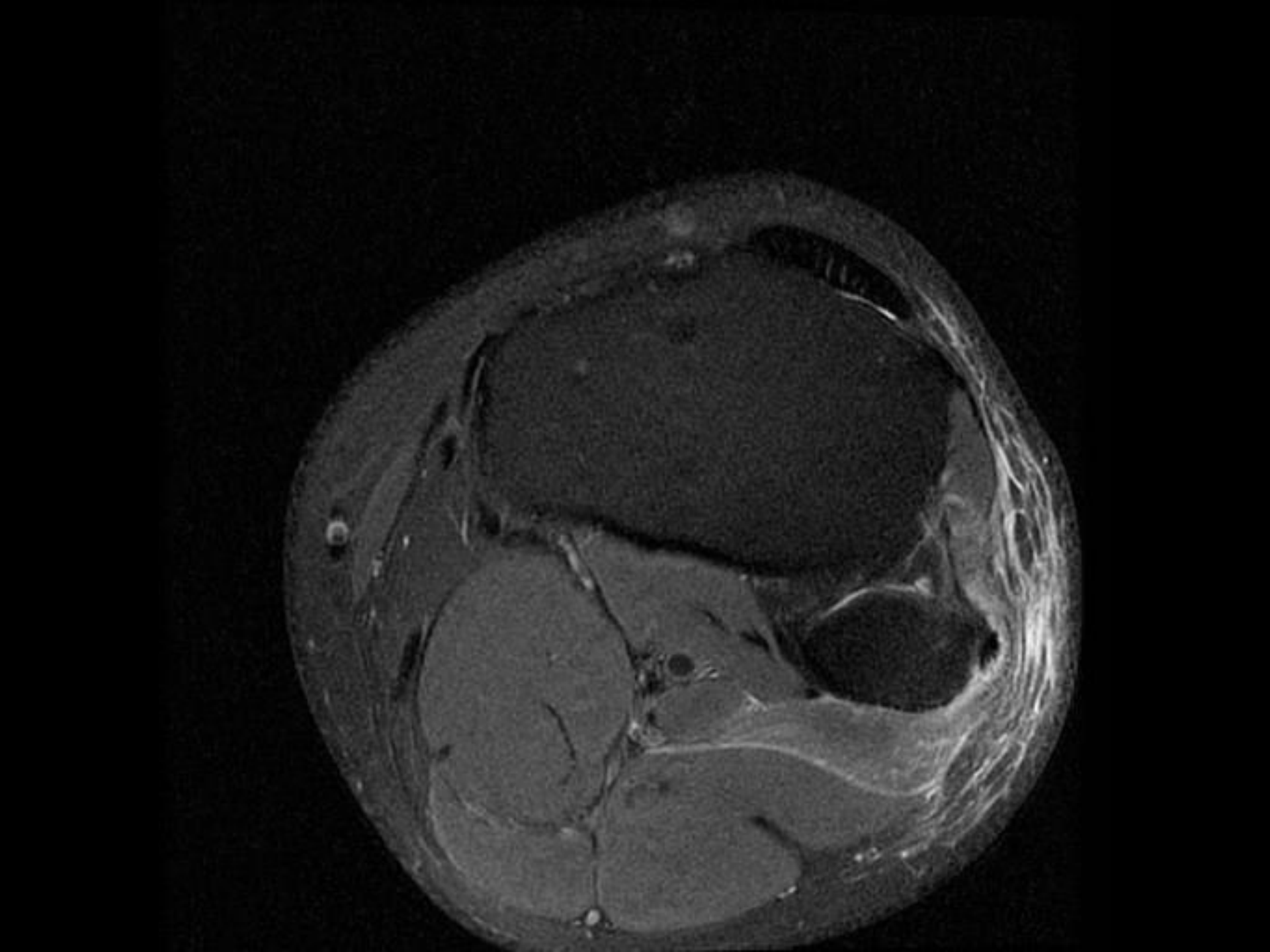

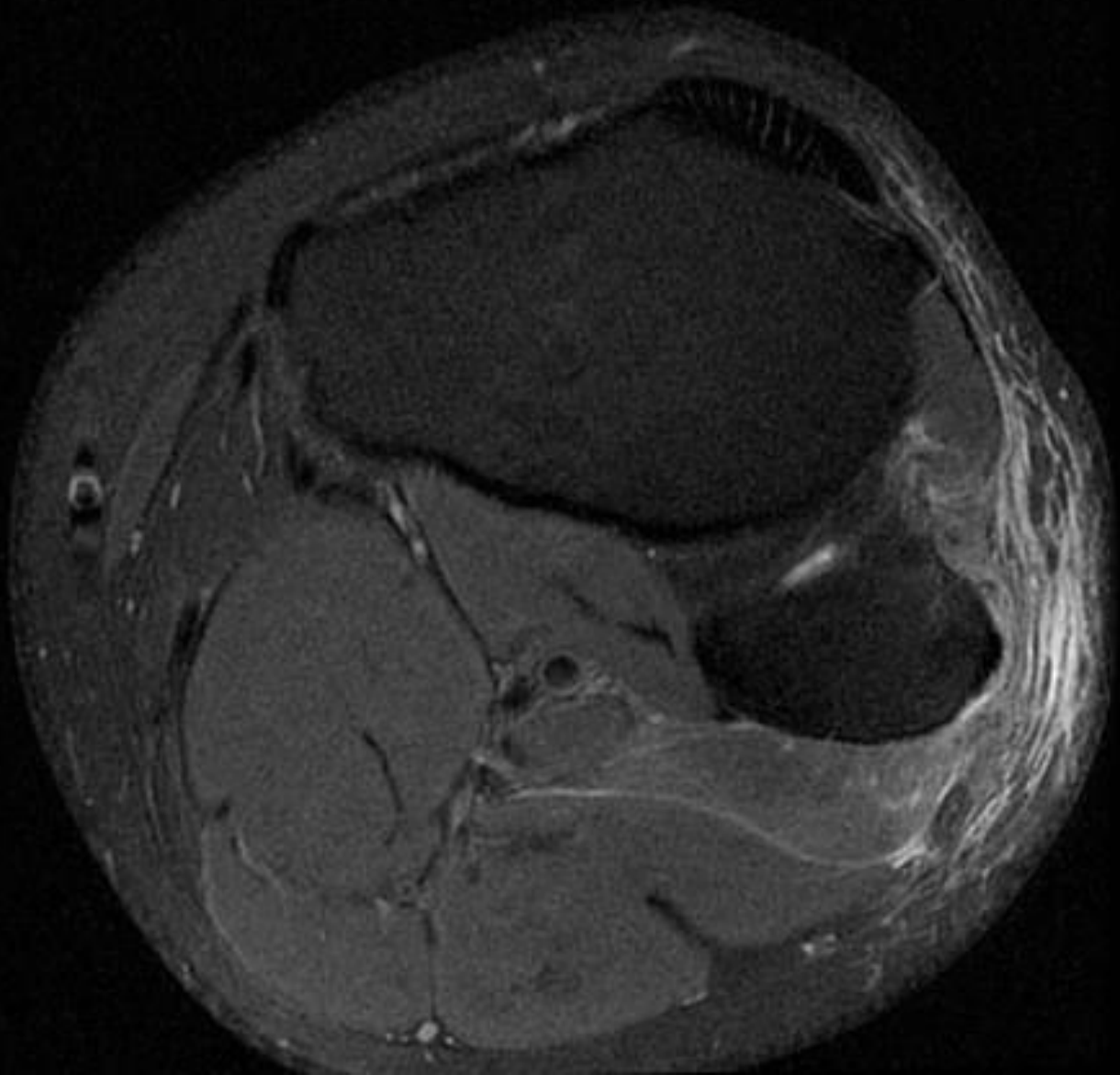

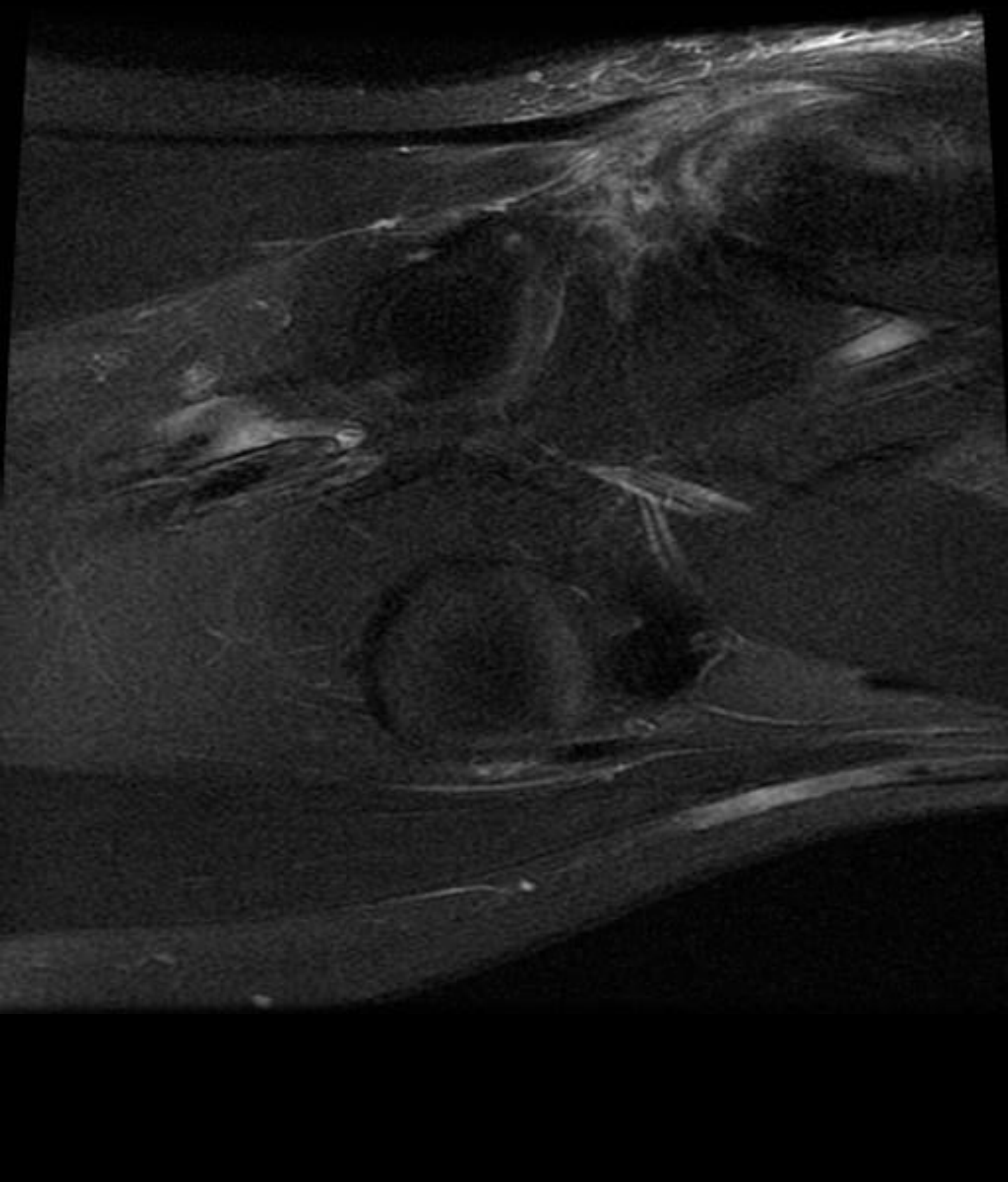

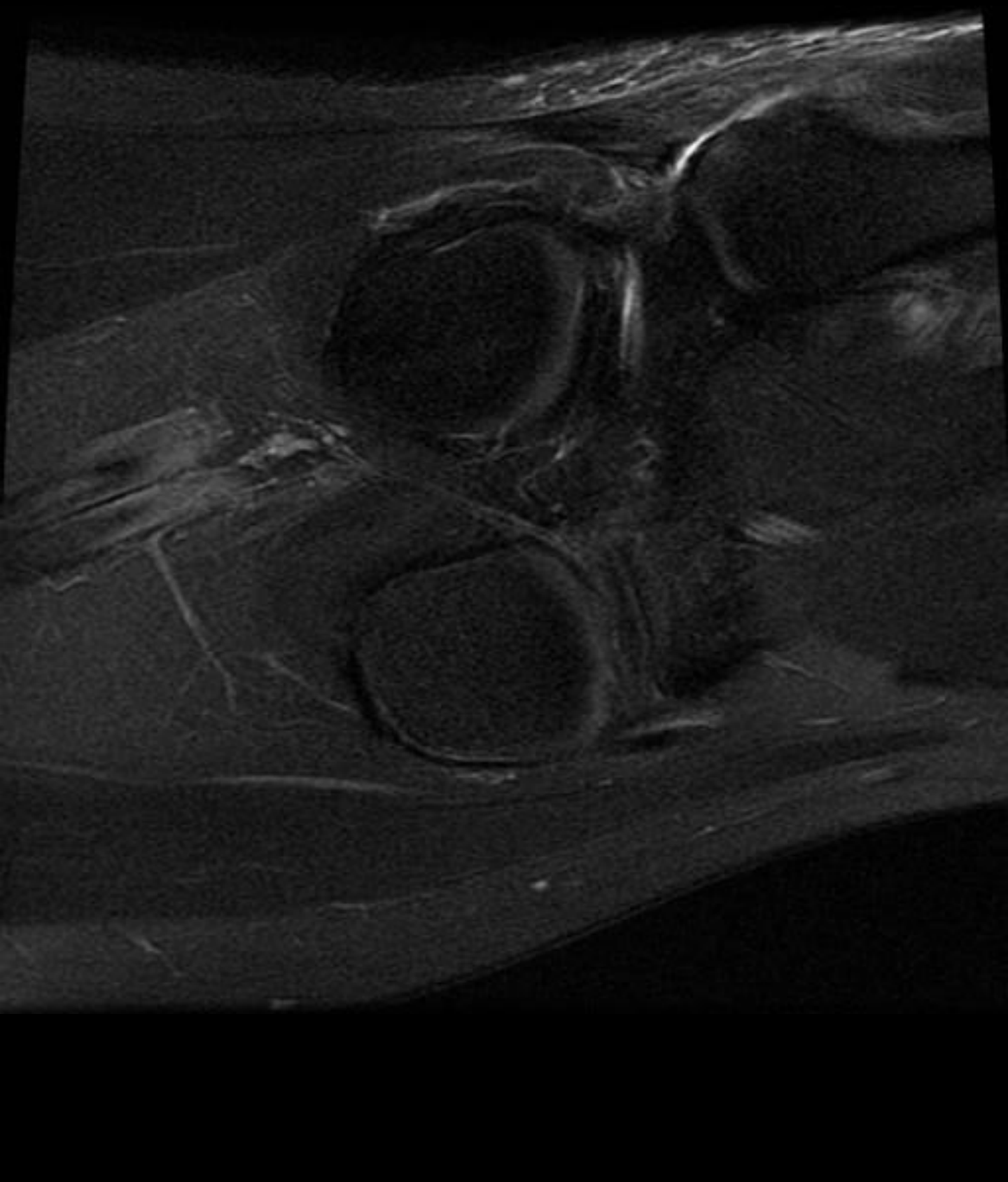

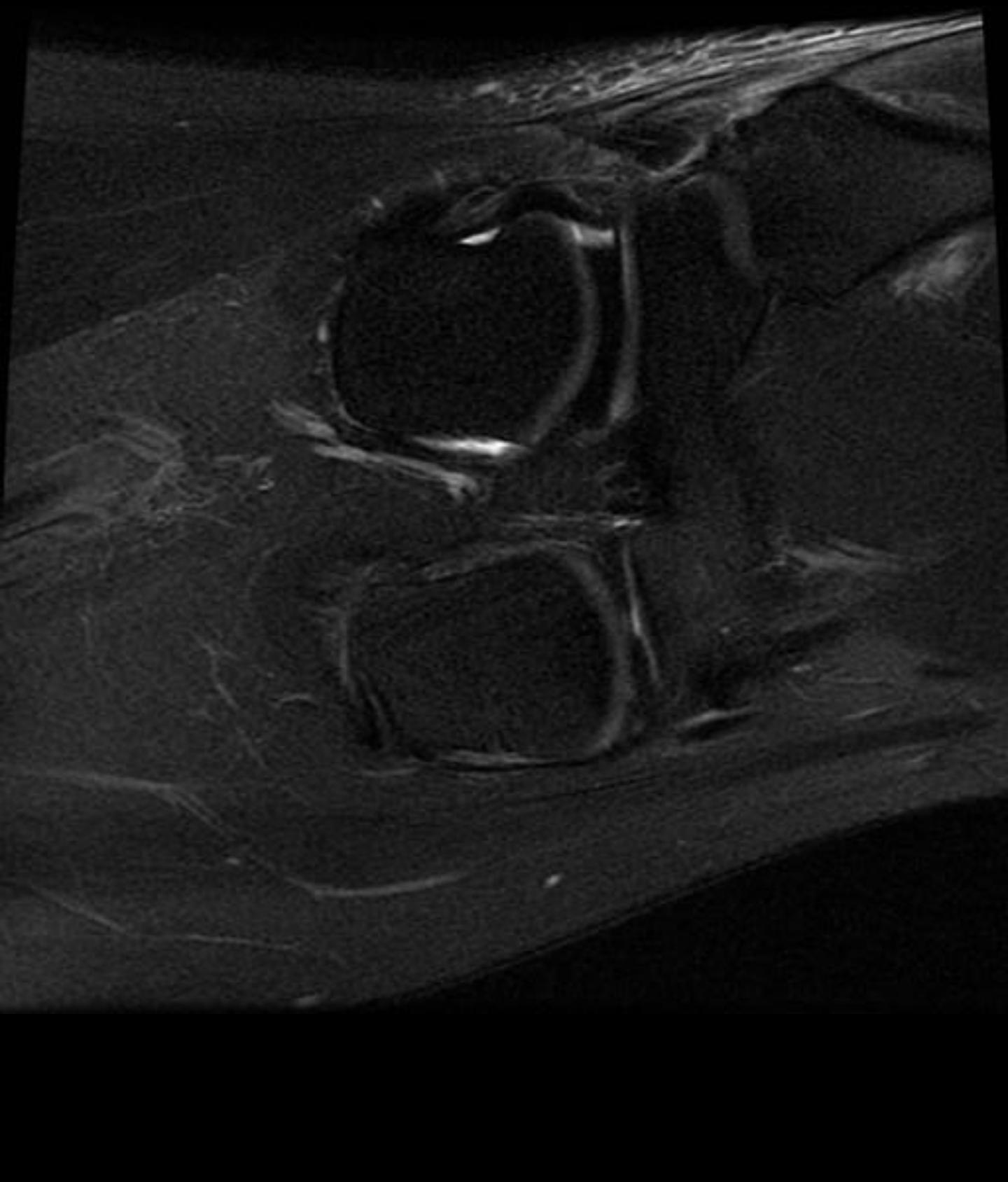

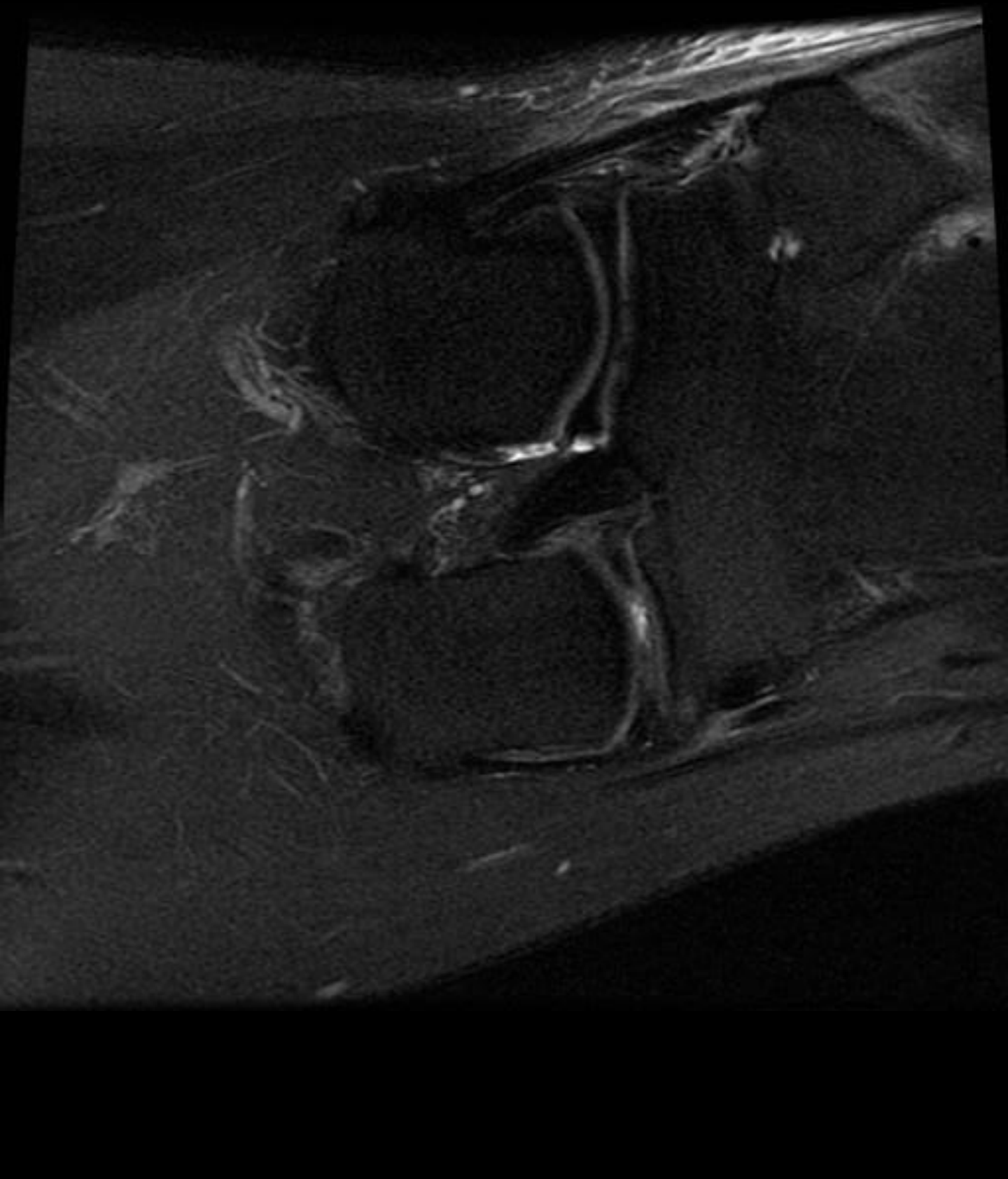

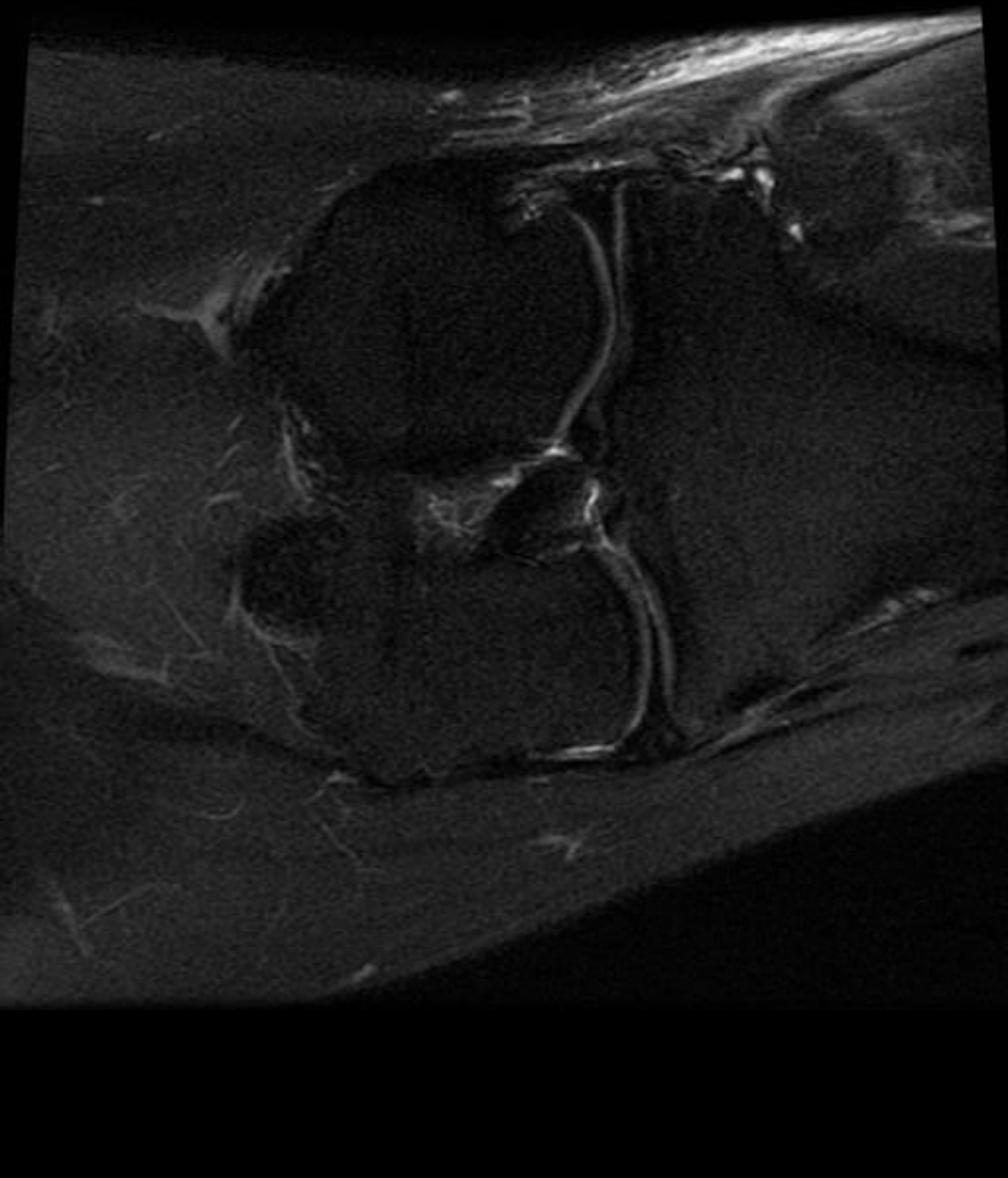

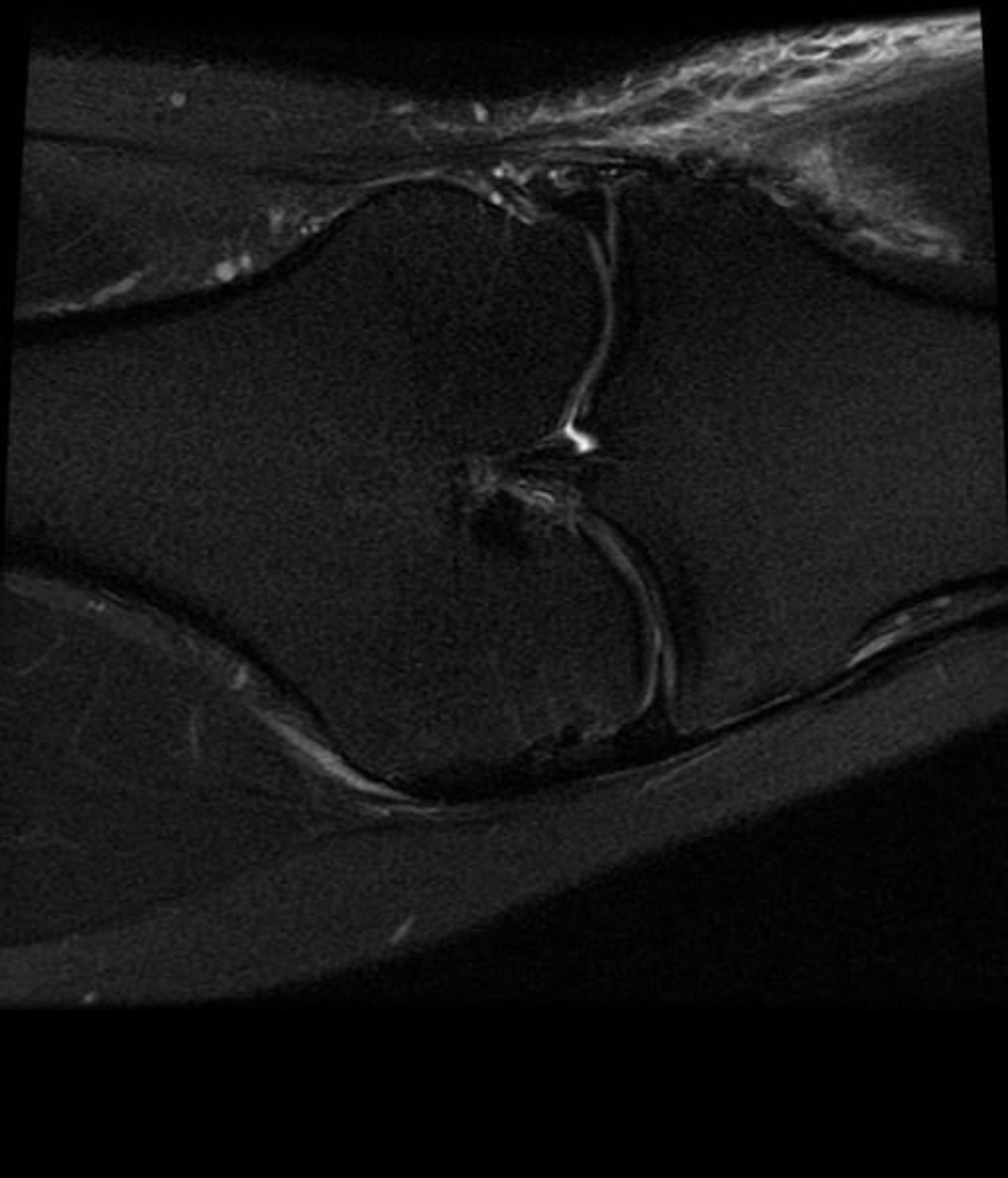

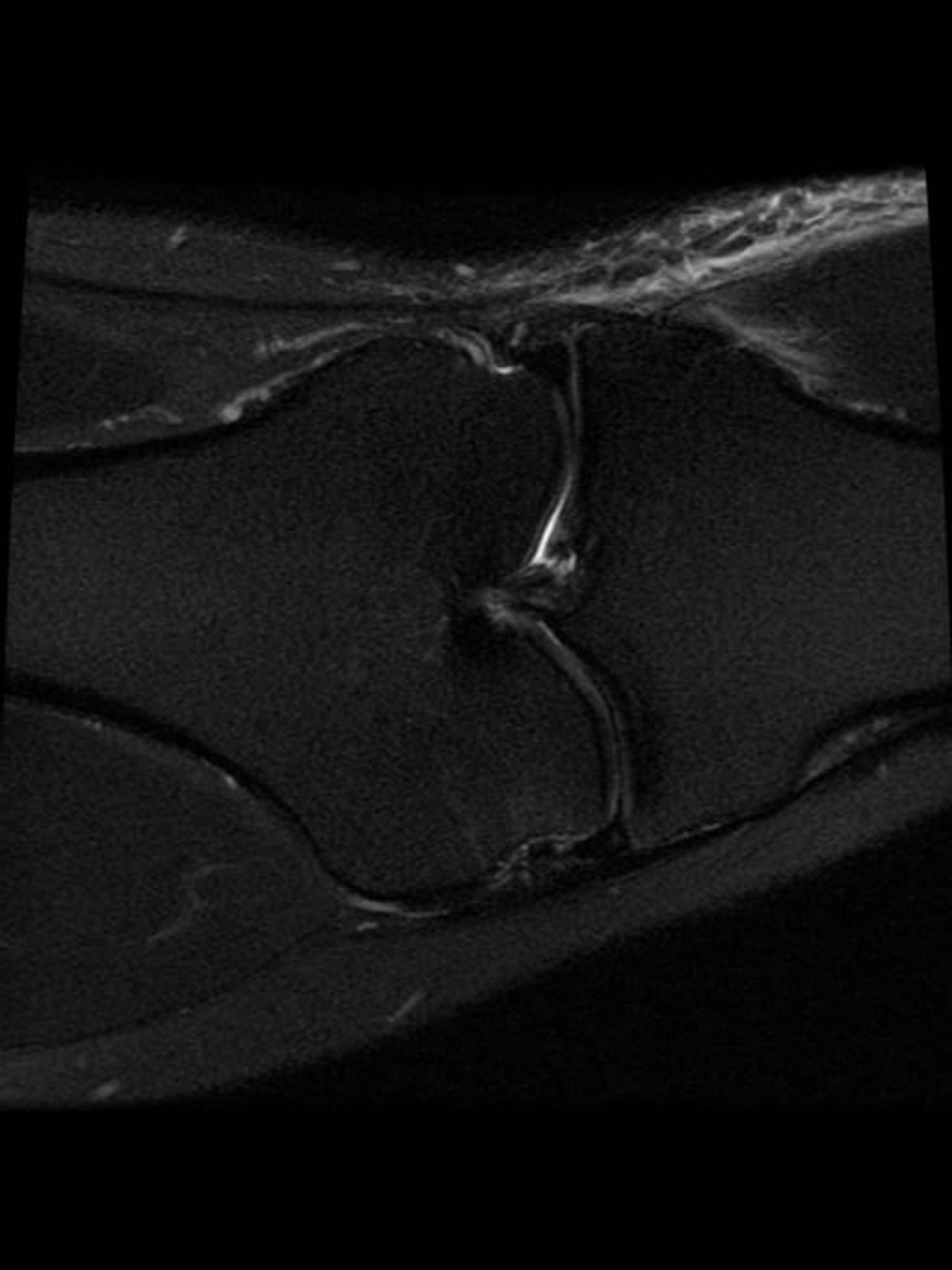

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