

# Auto Mobile Accident and/or Knee Pain





























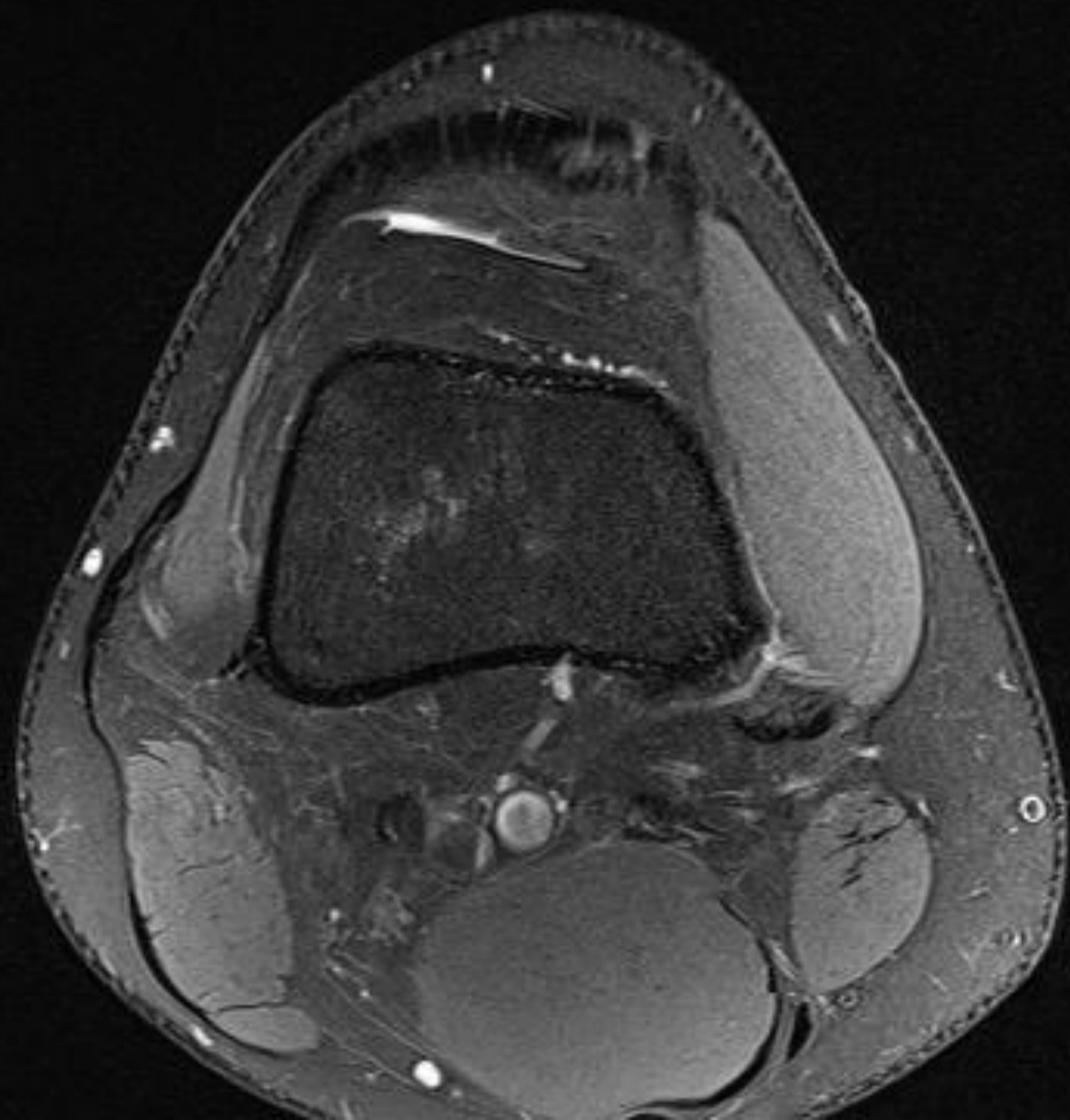




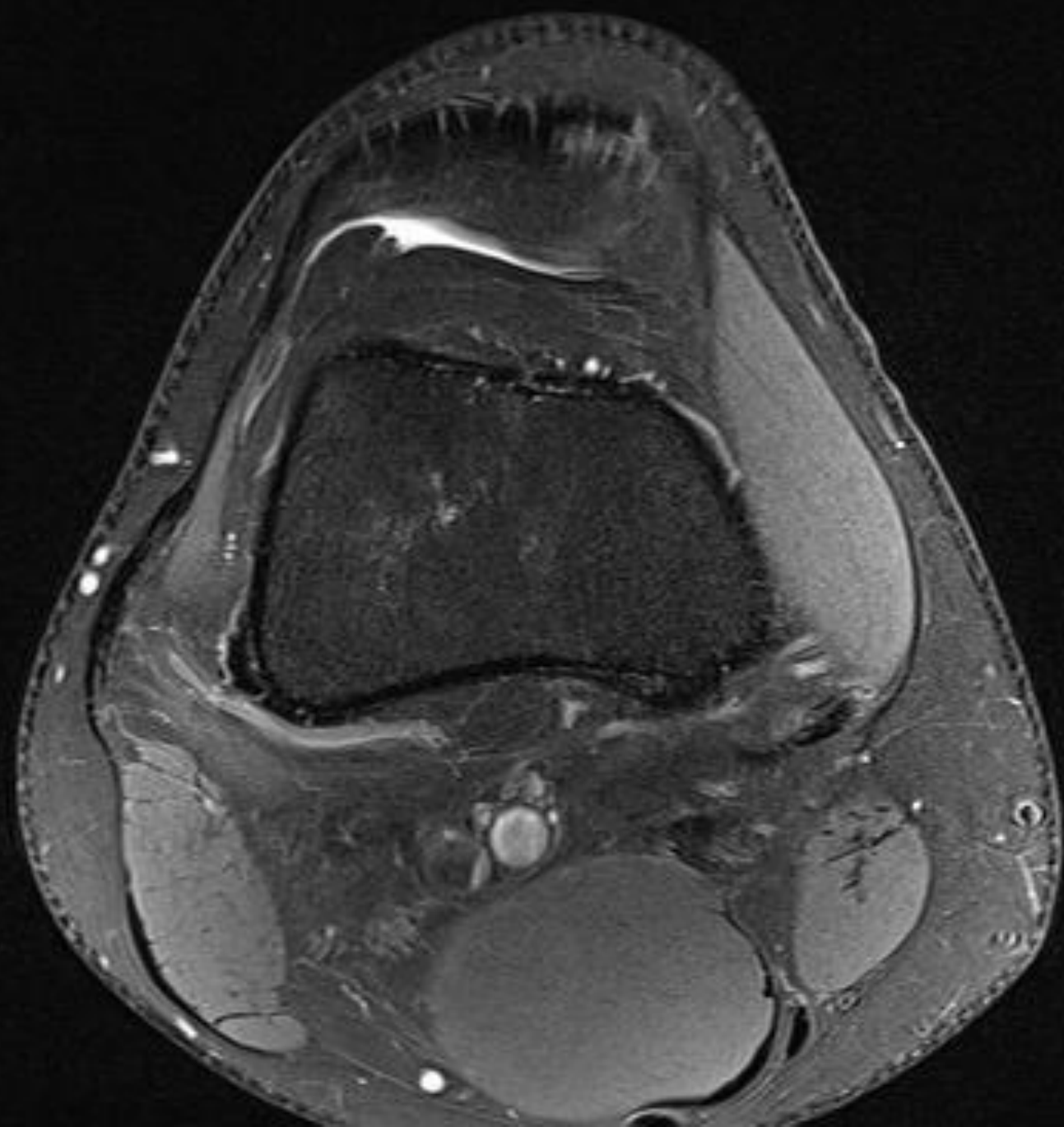


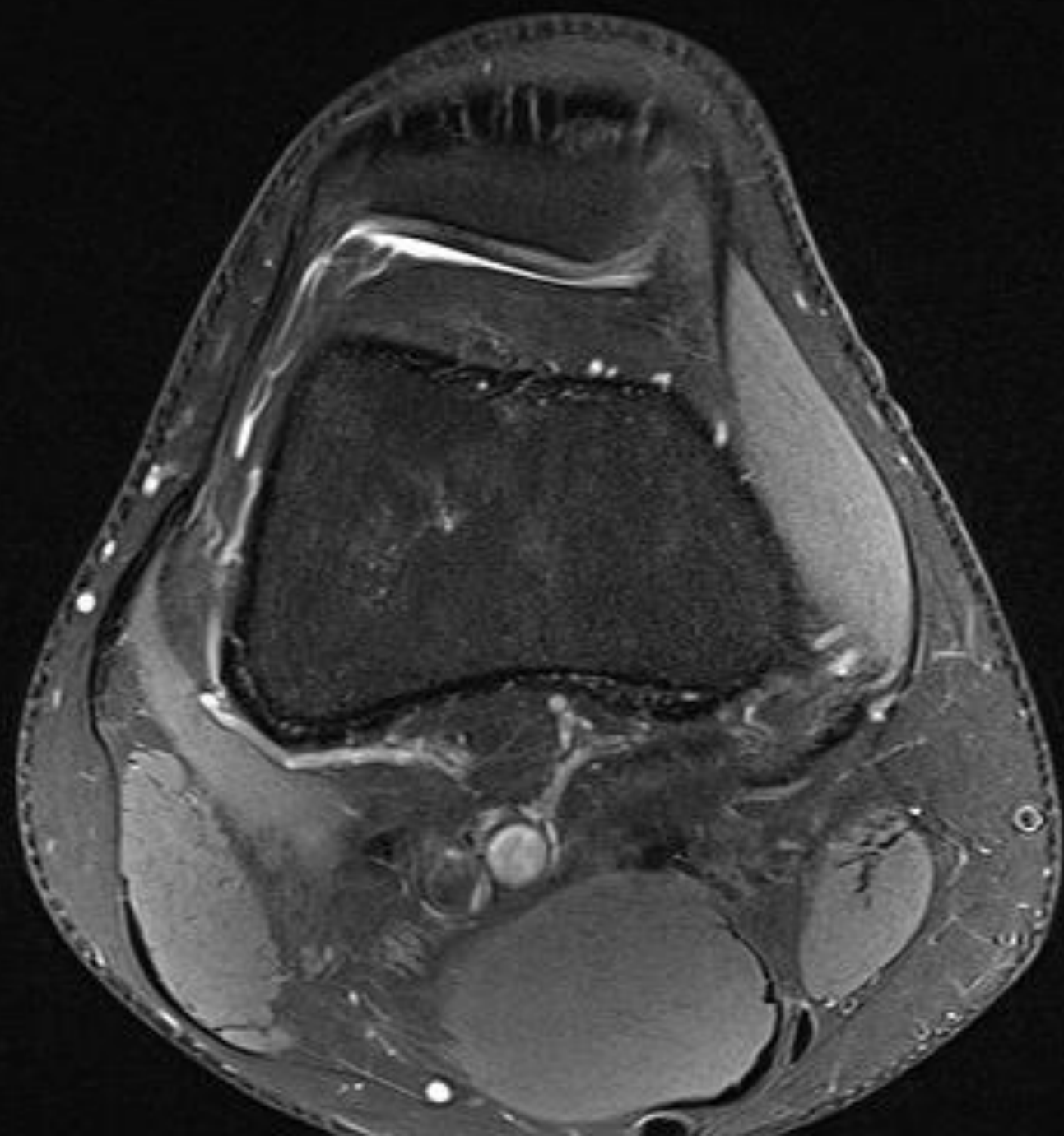


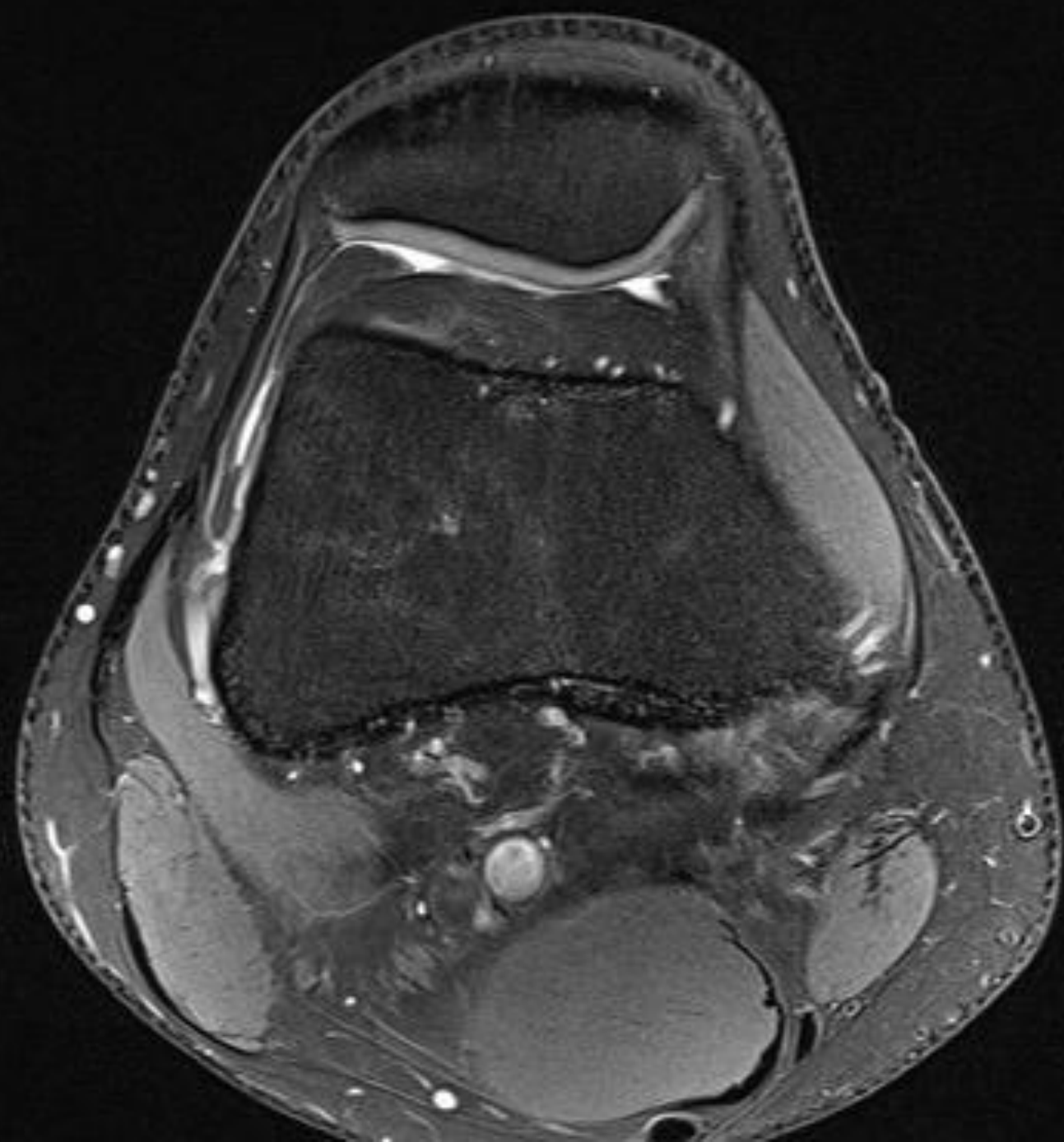


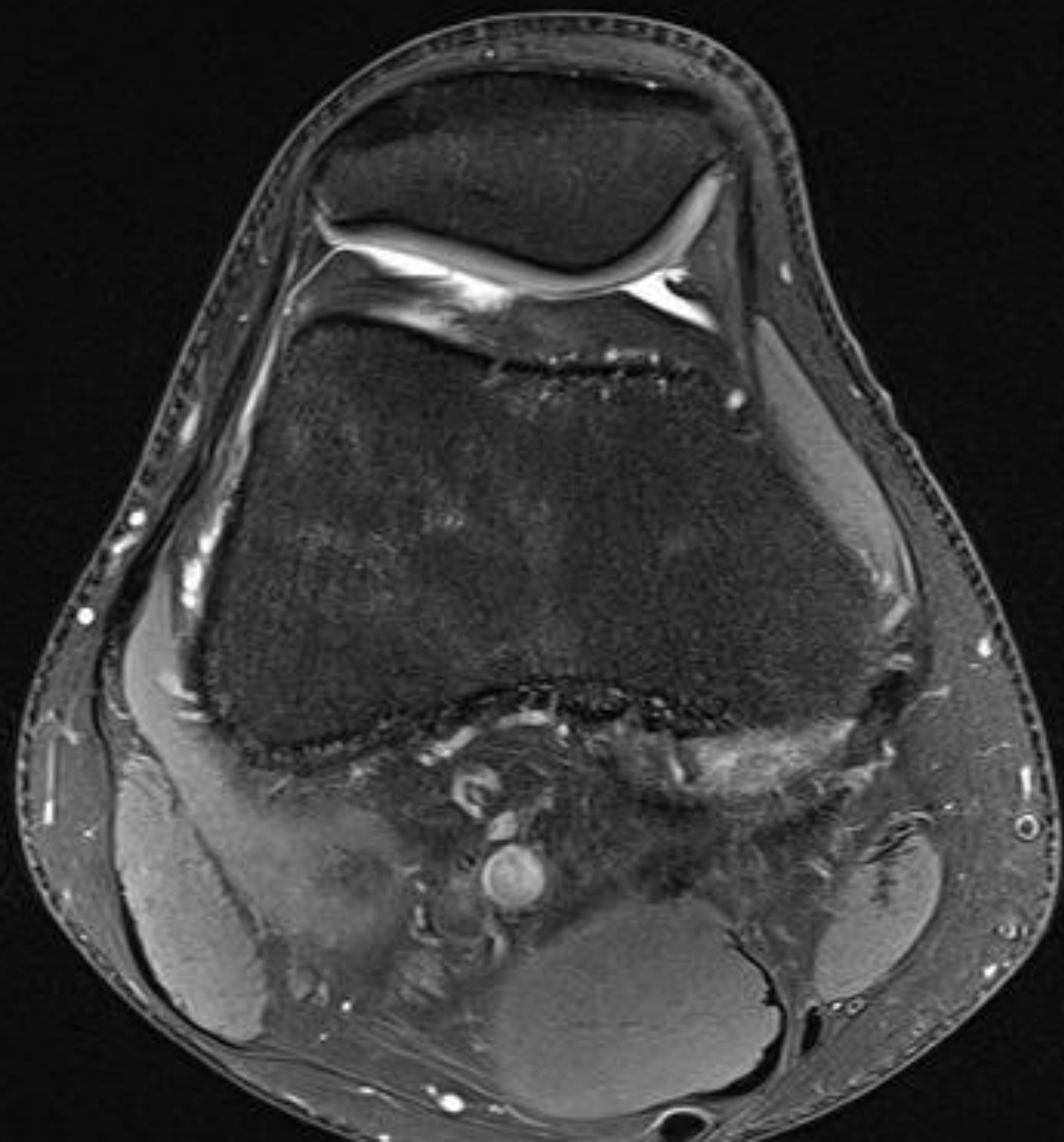


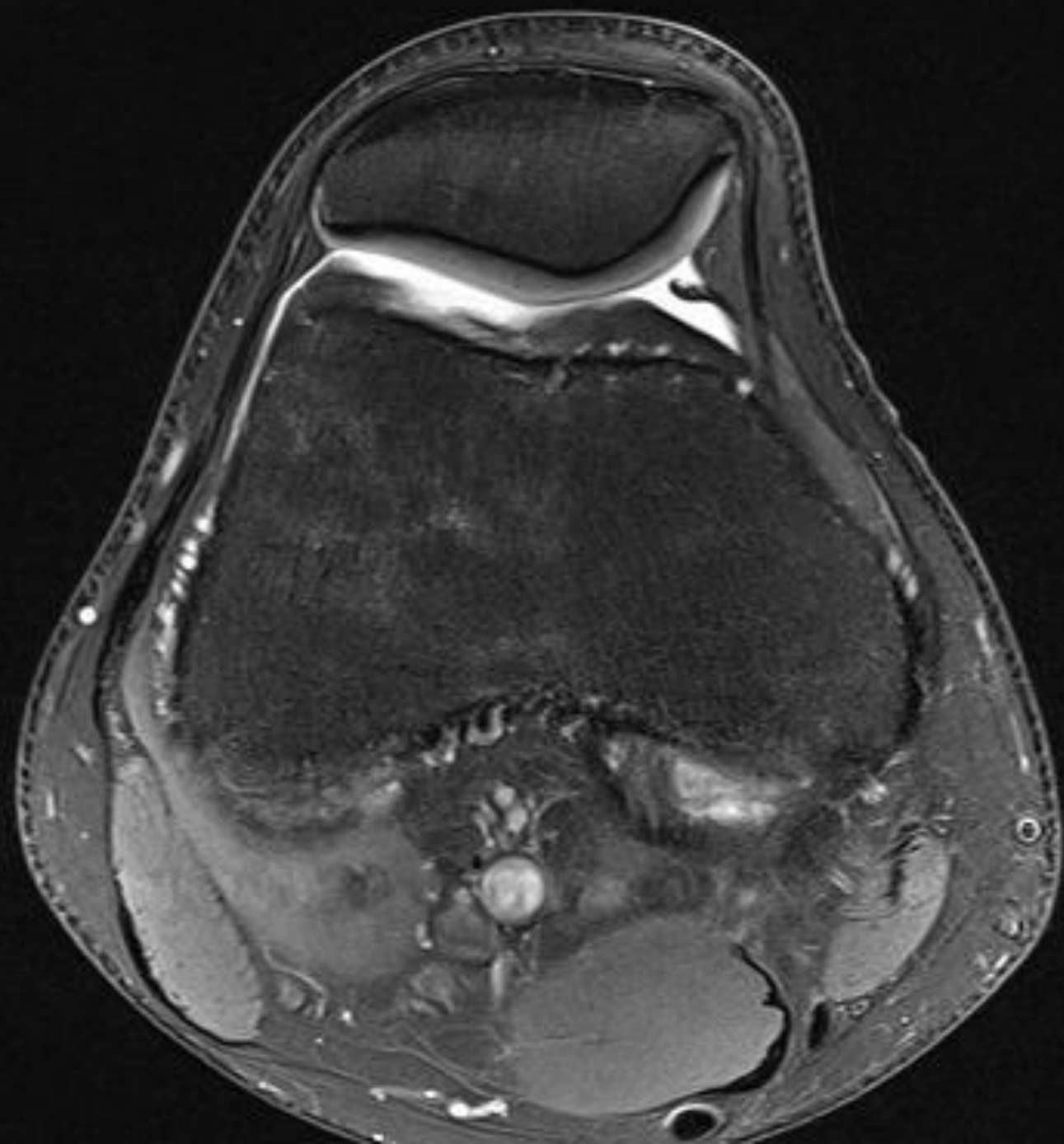






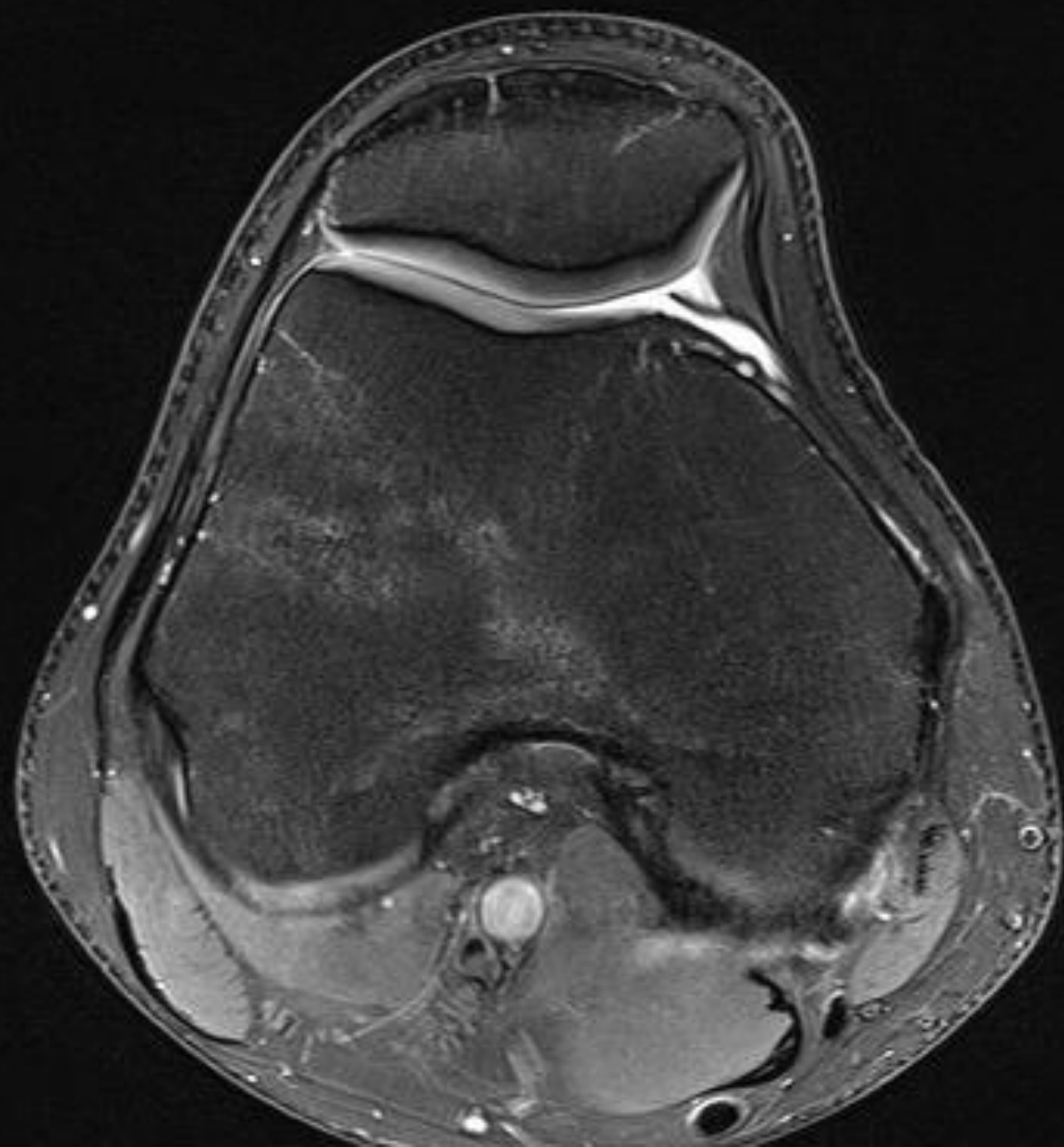


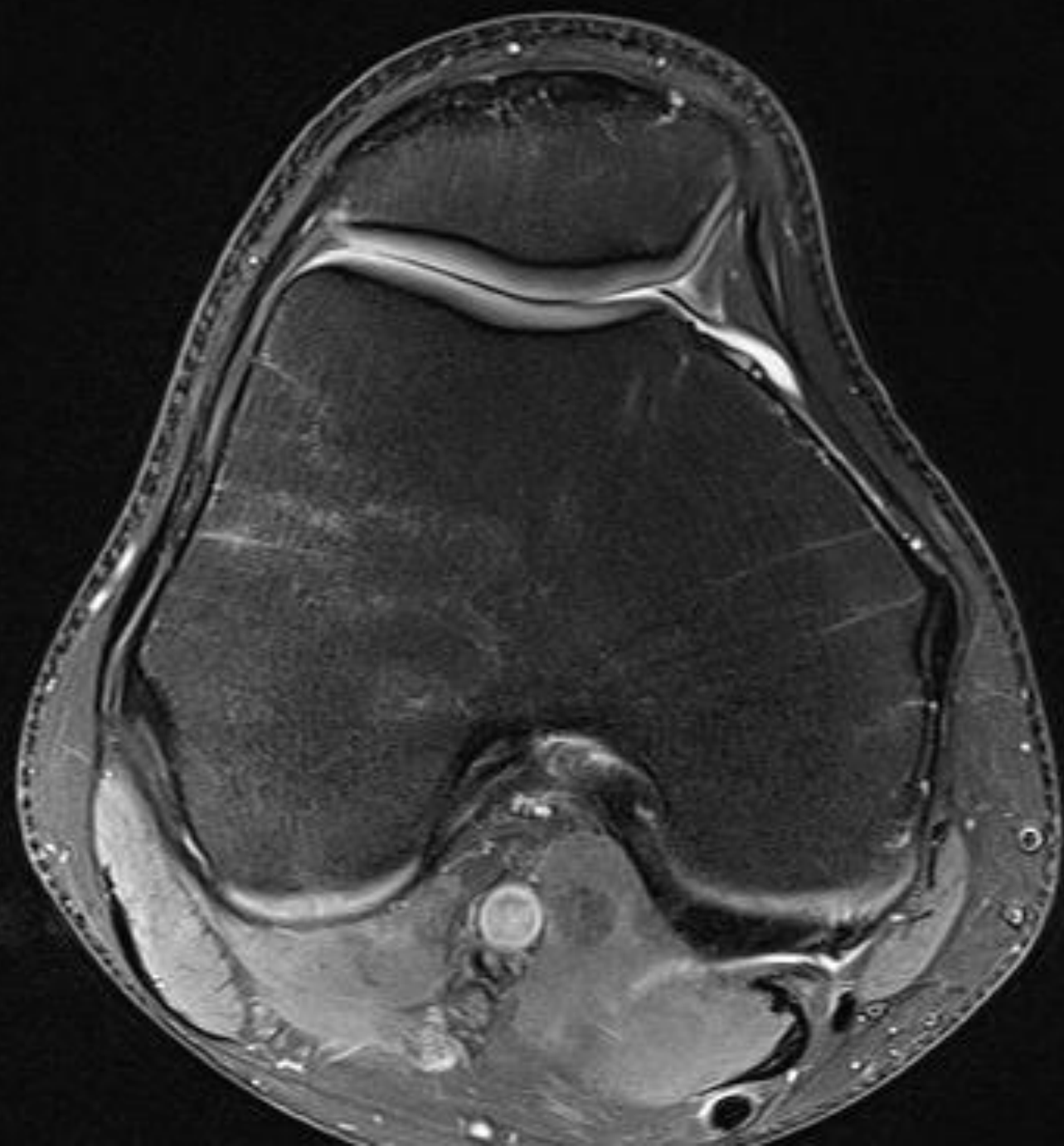




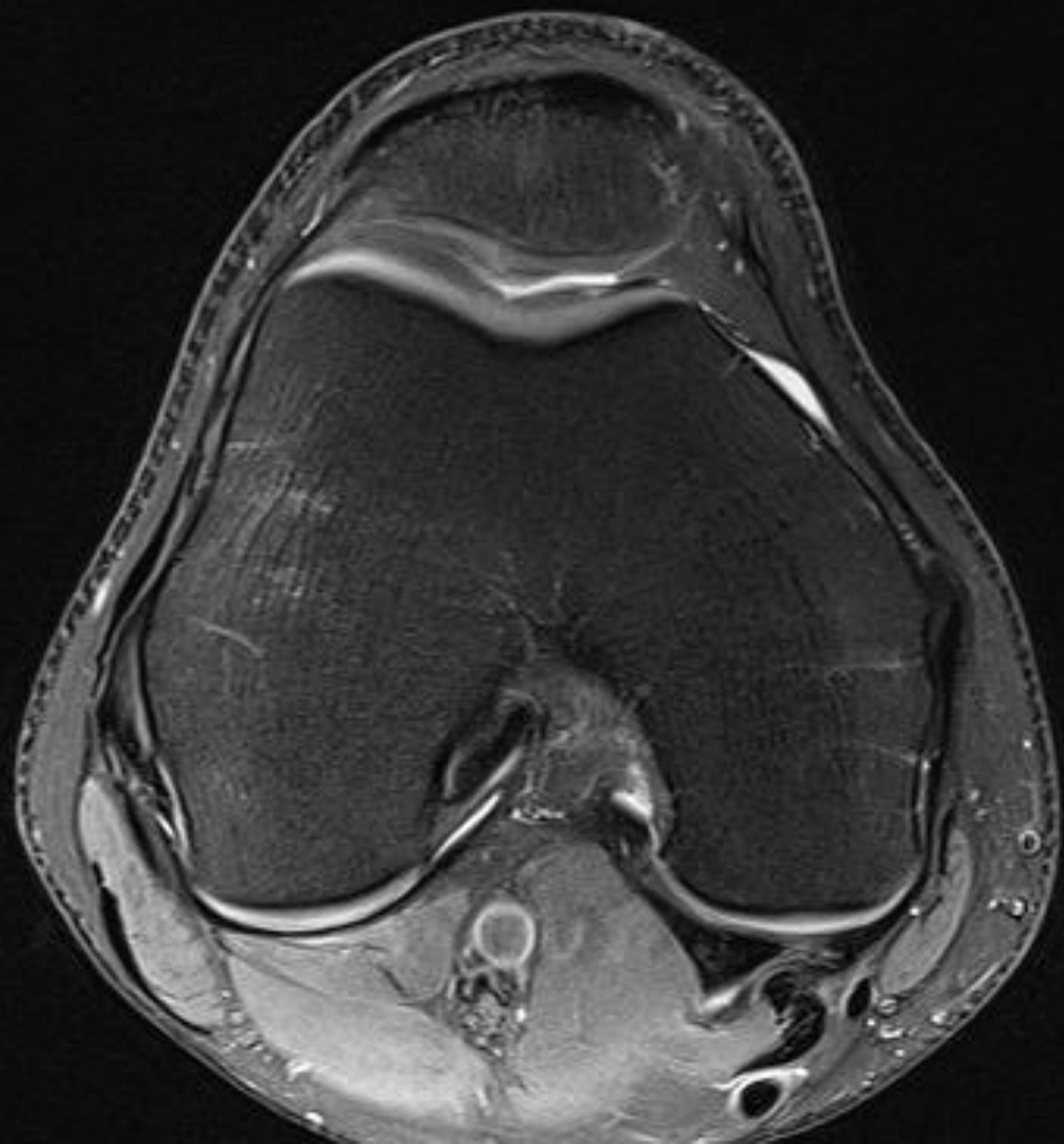


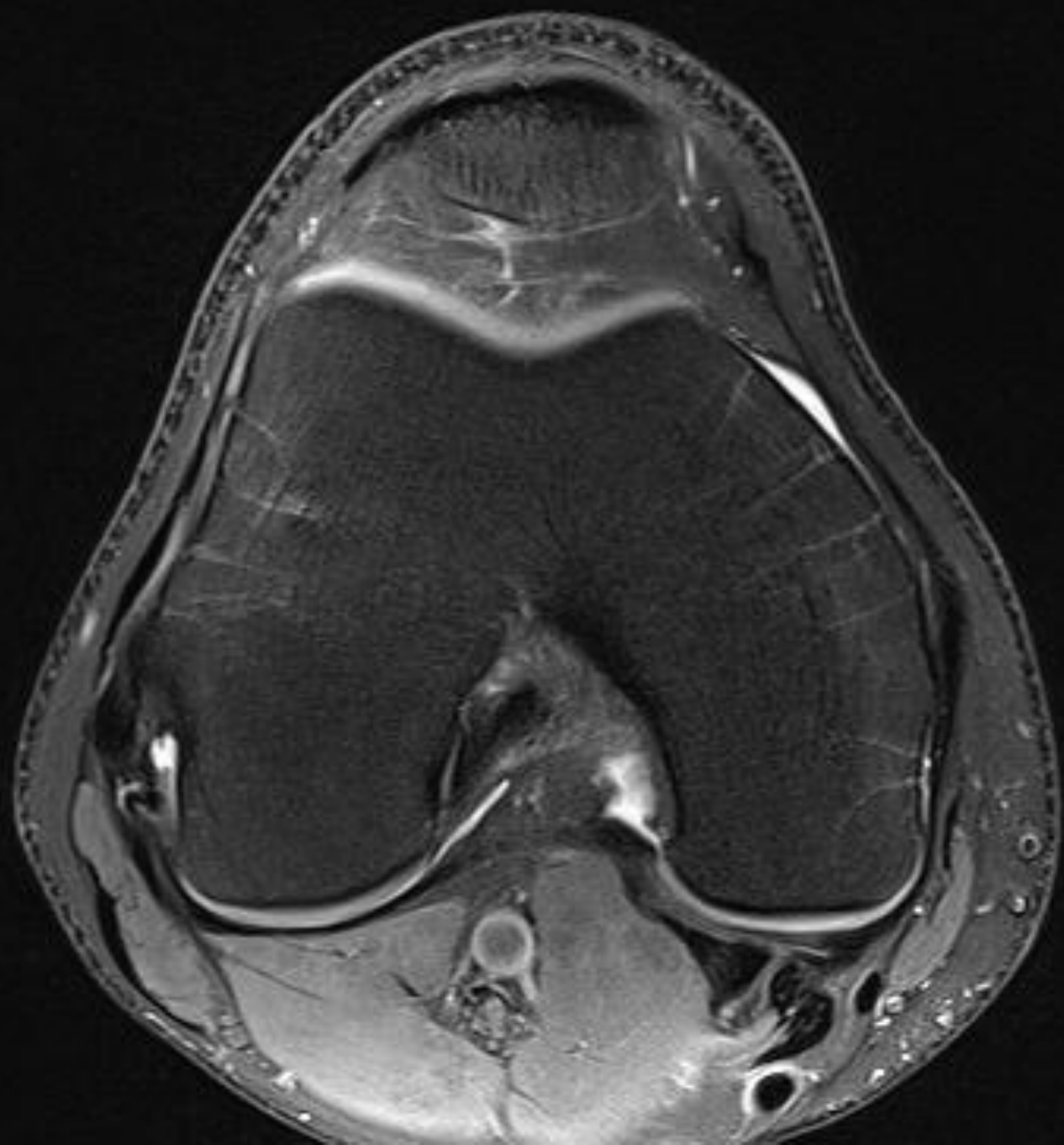




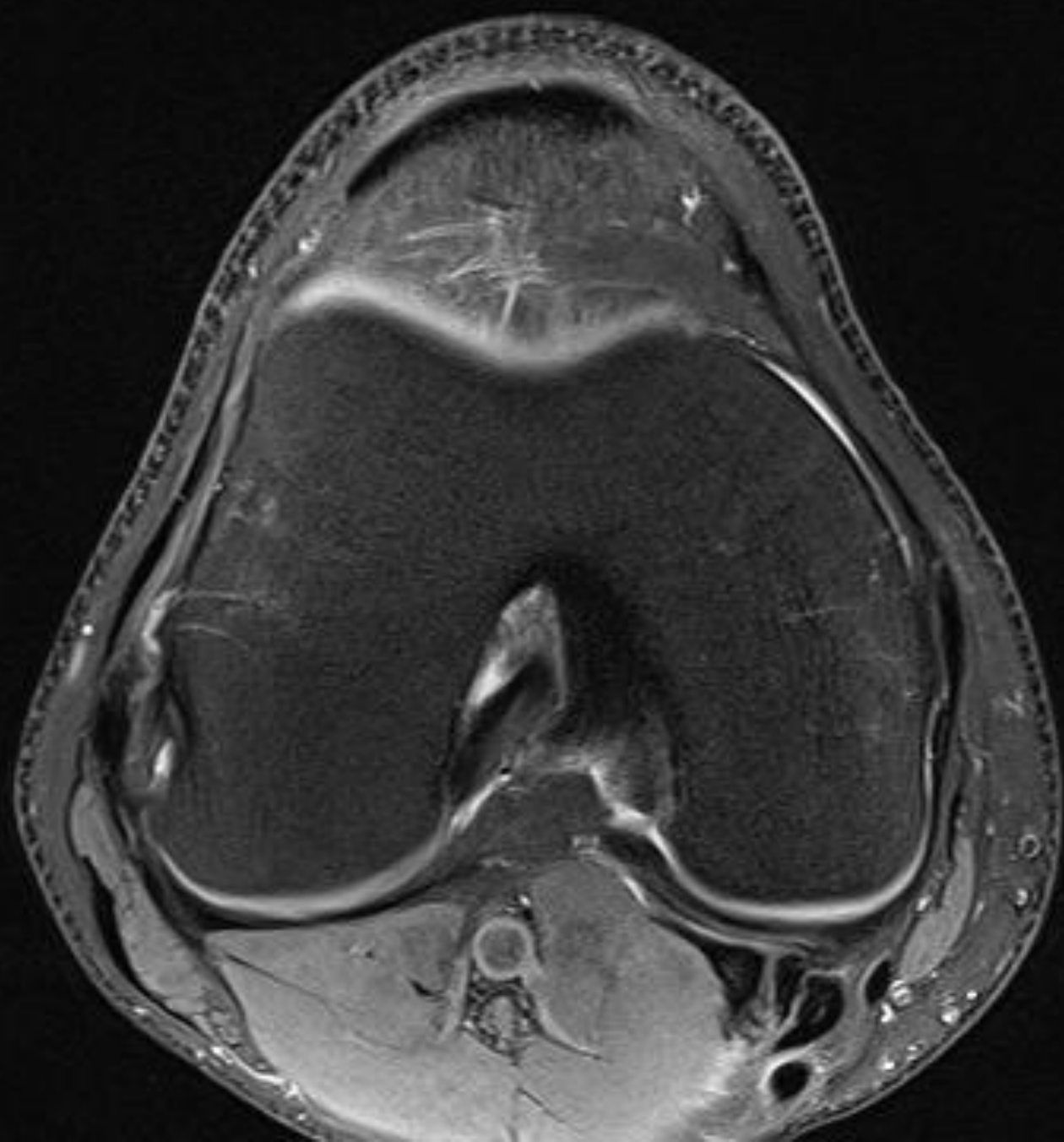


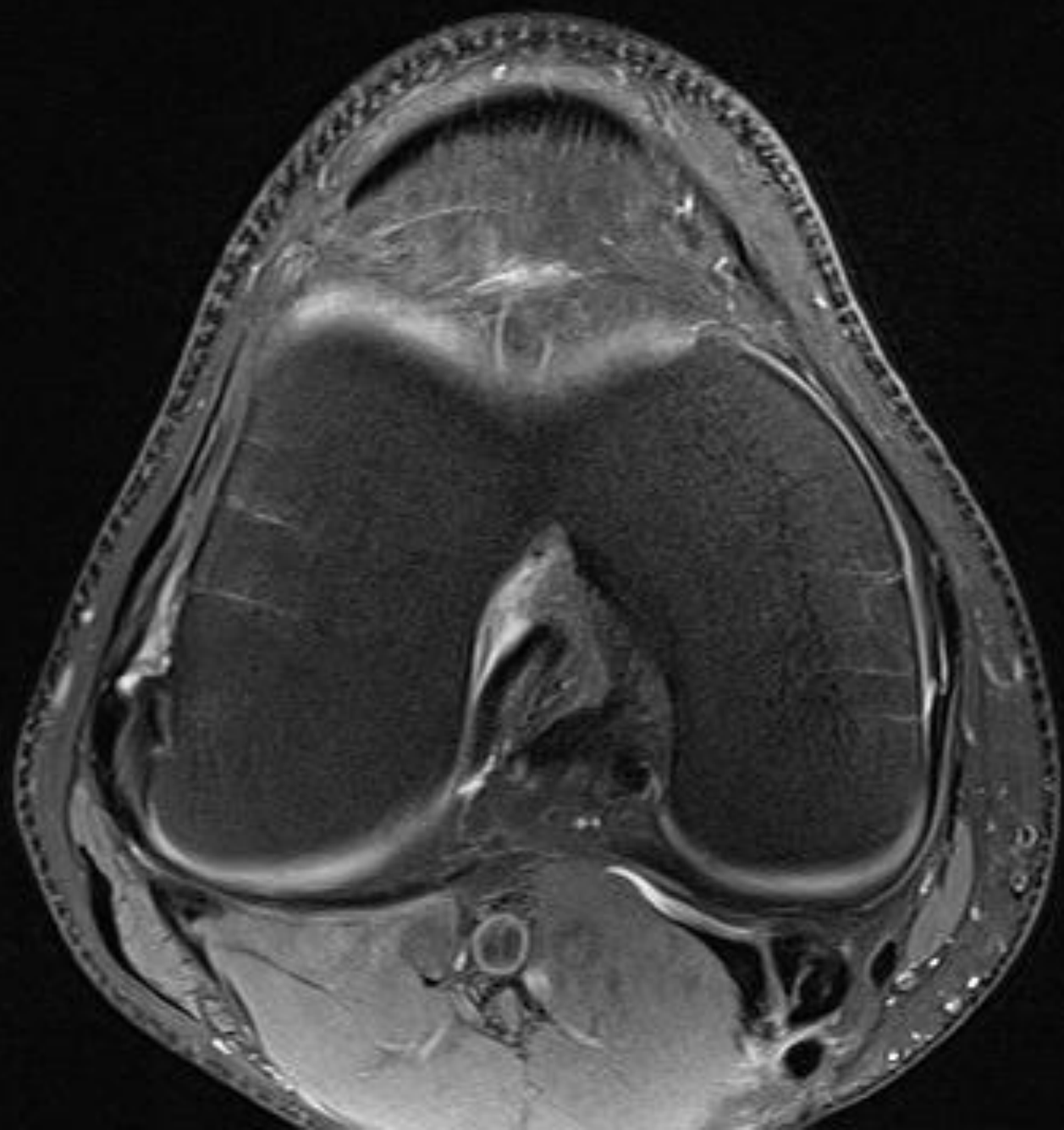


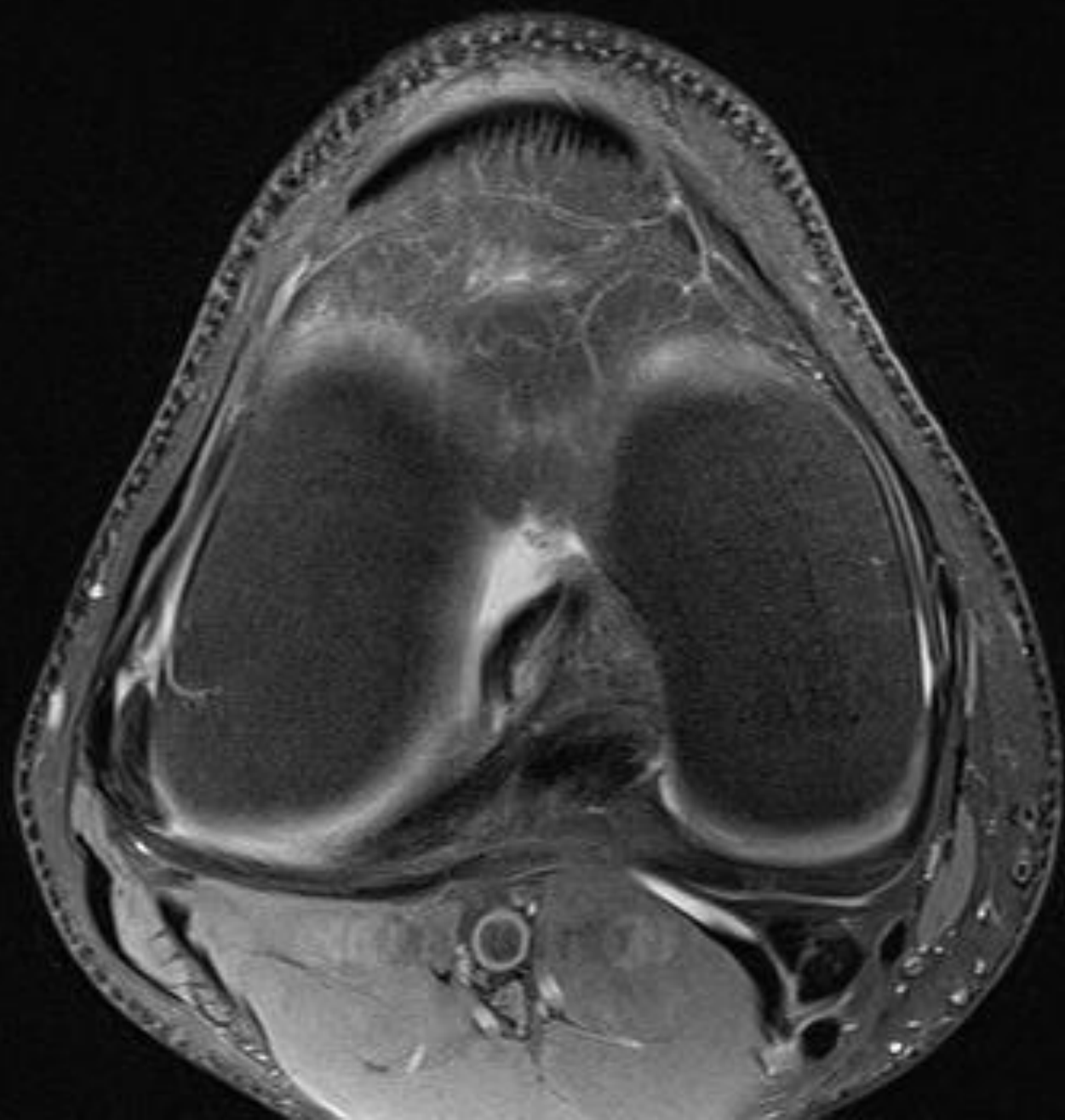


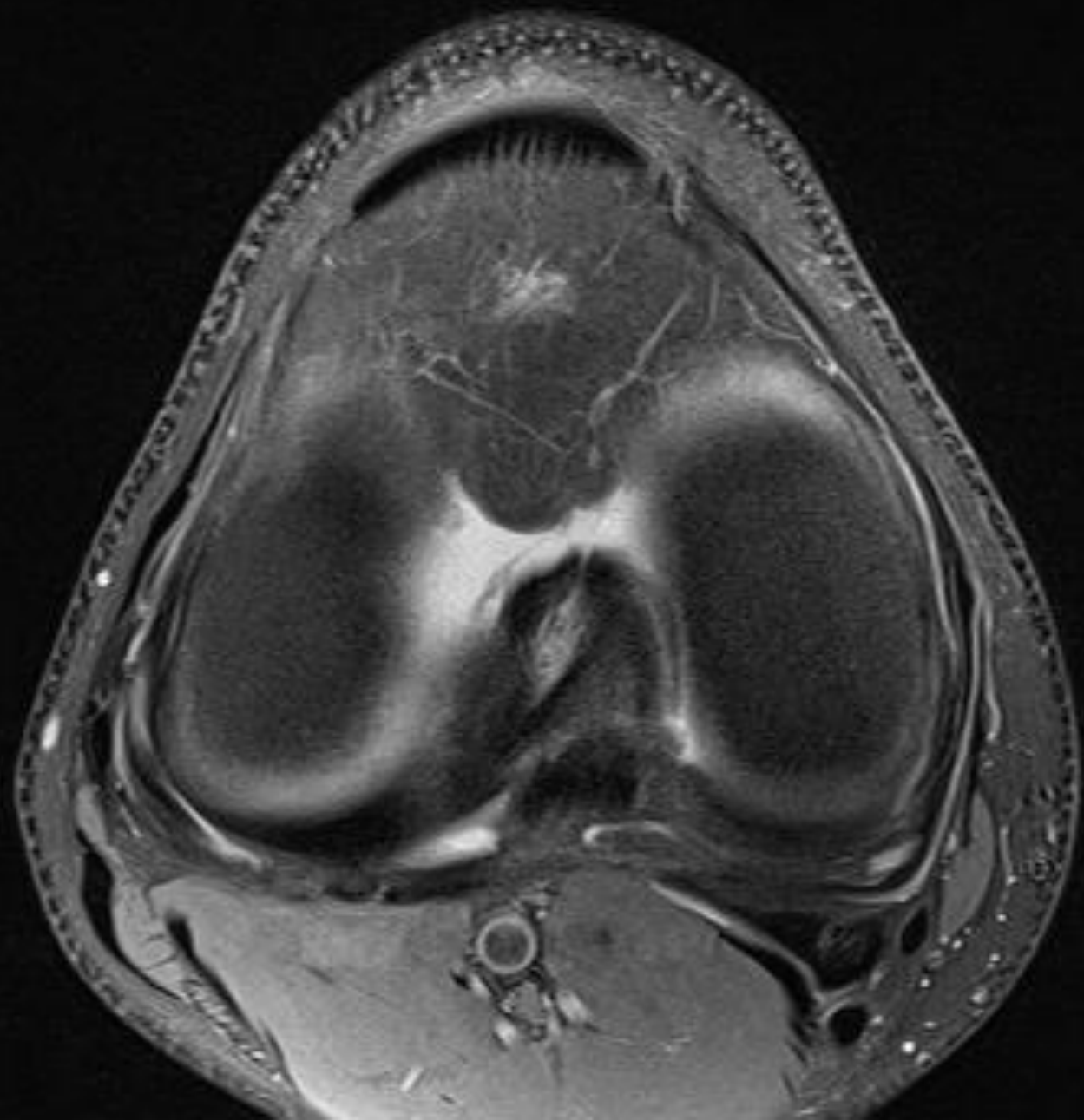


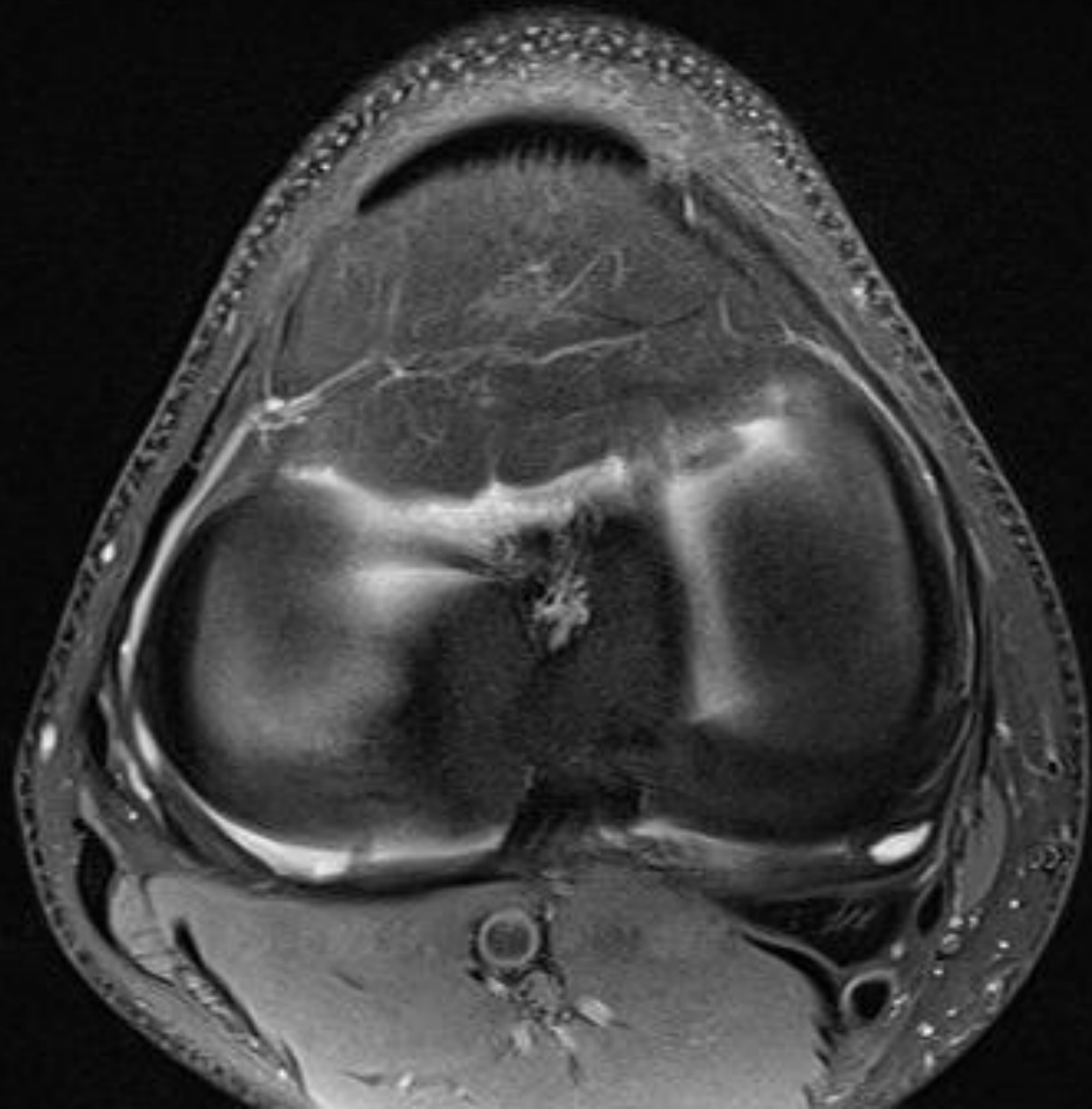


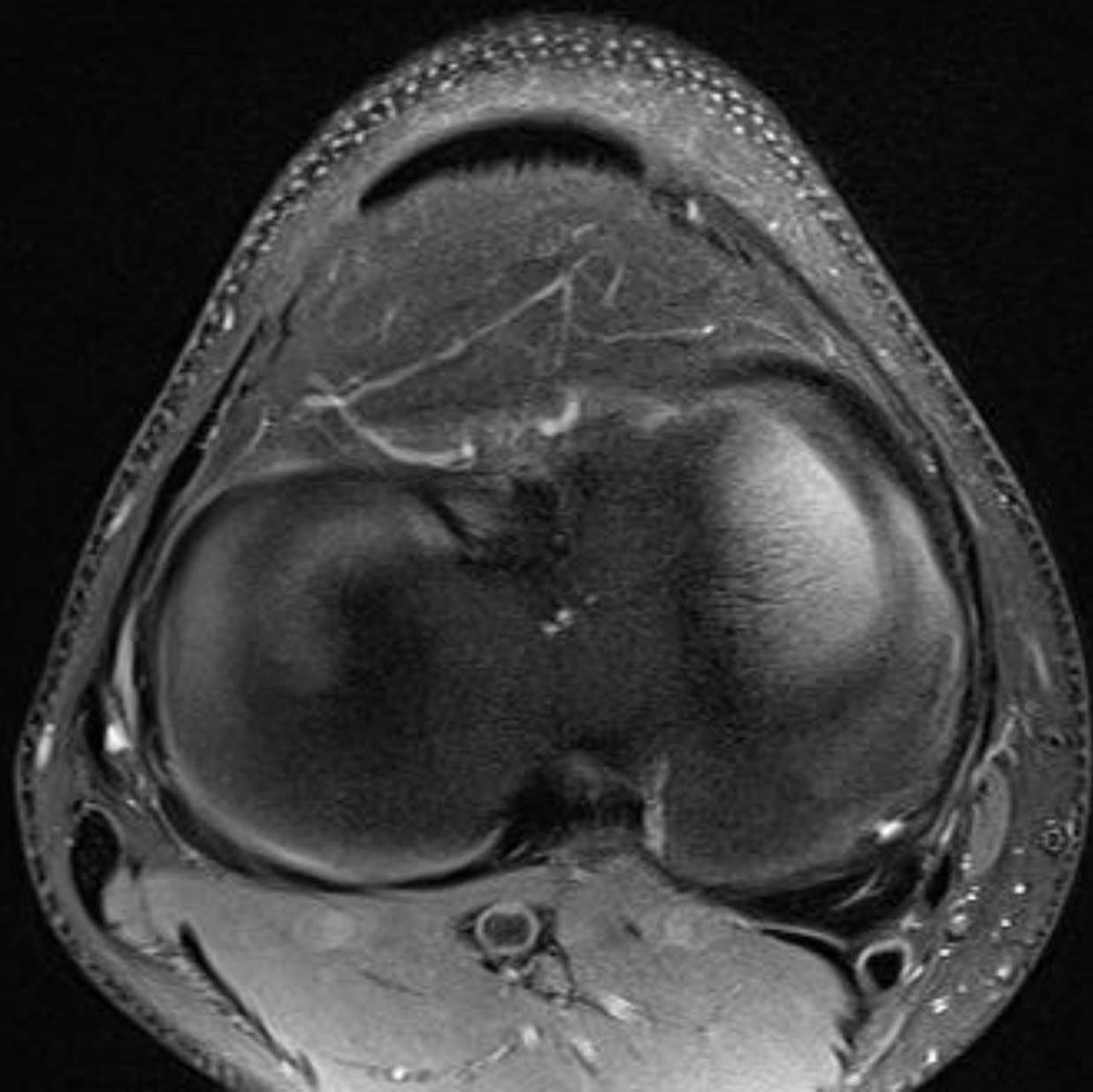




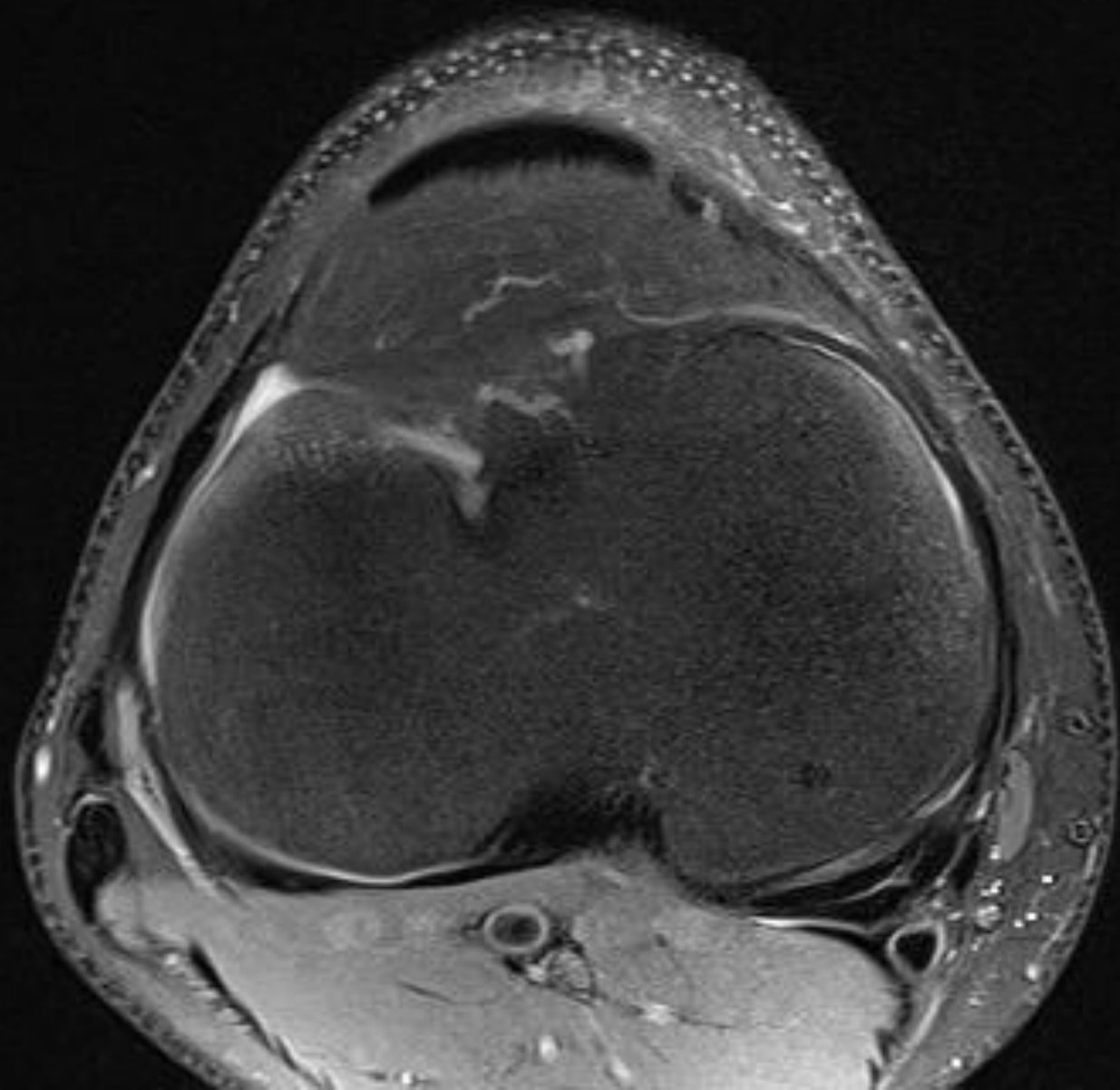


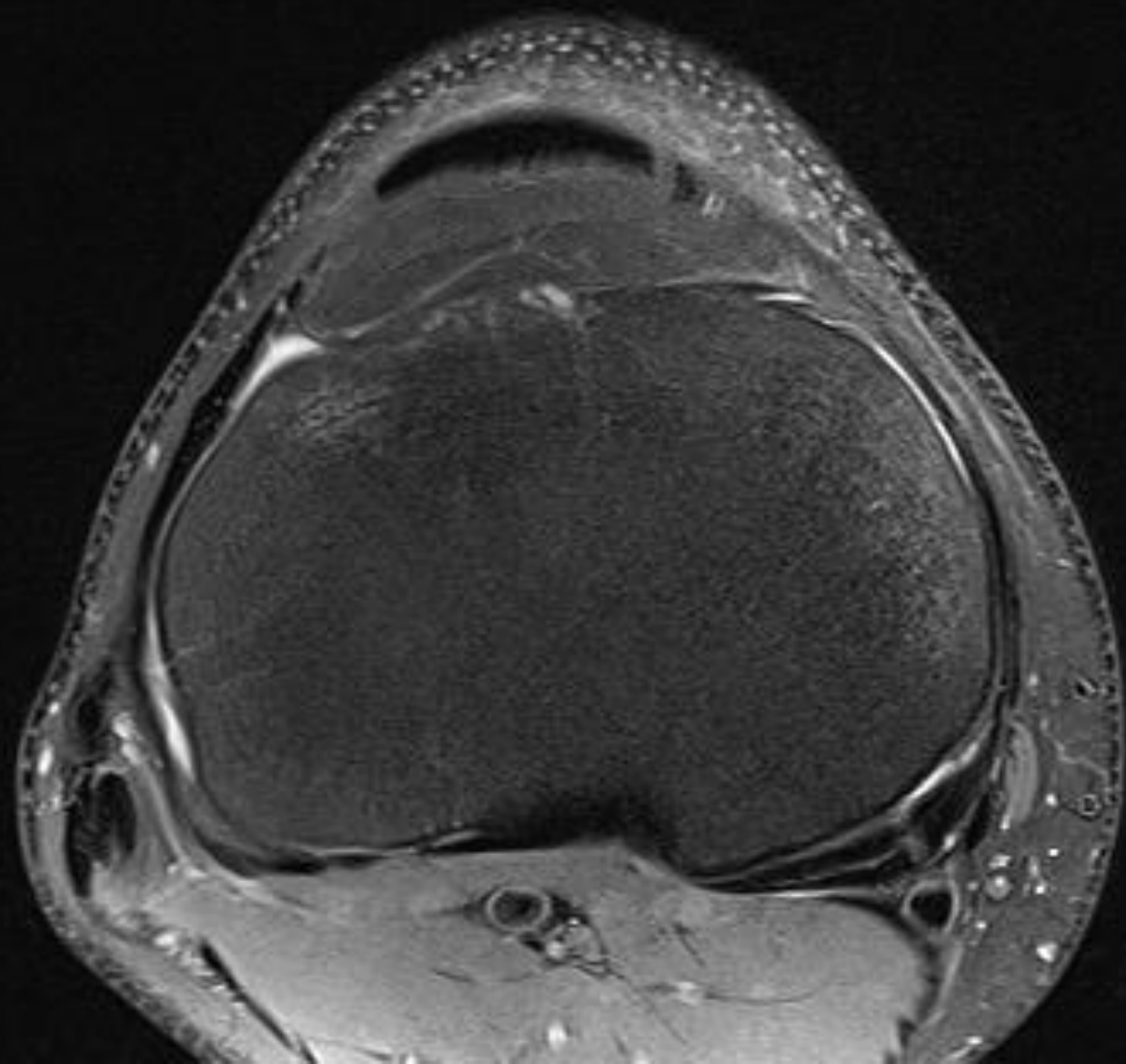


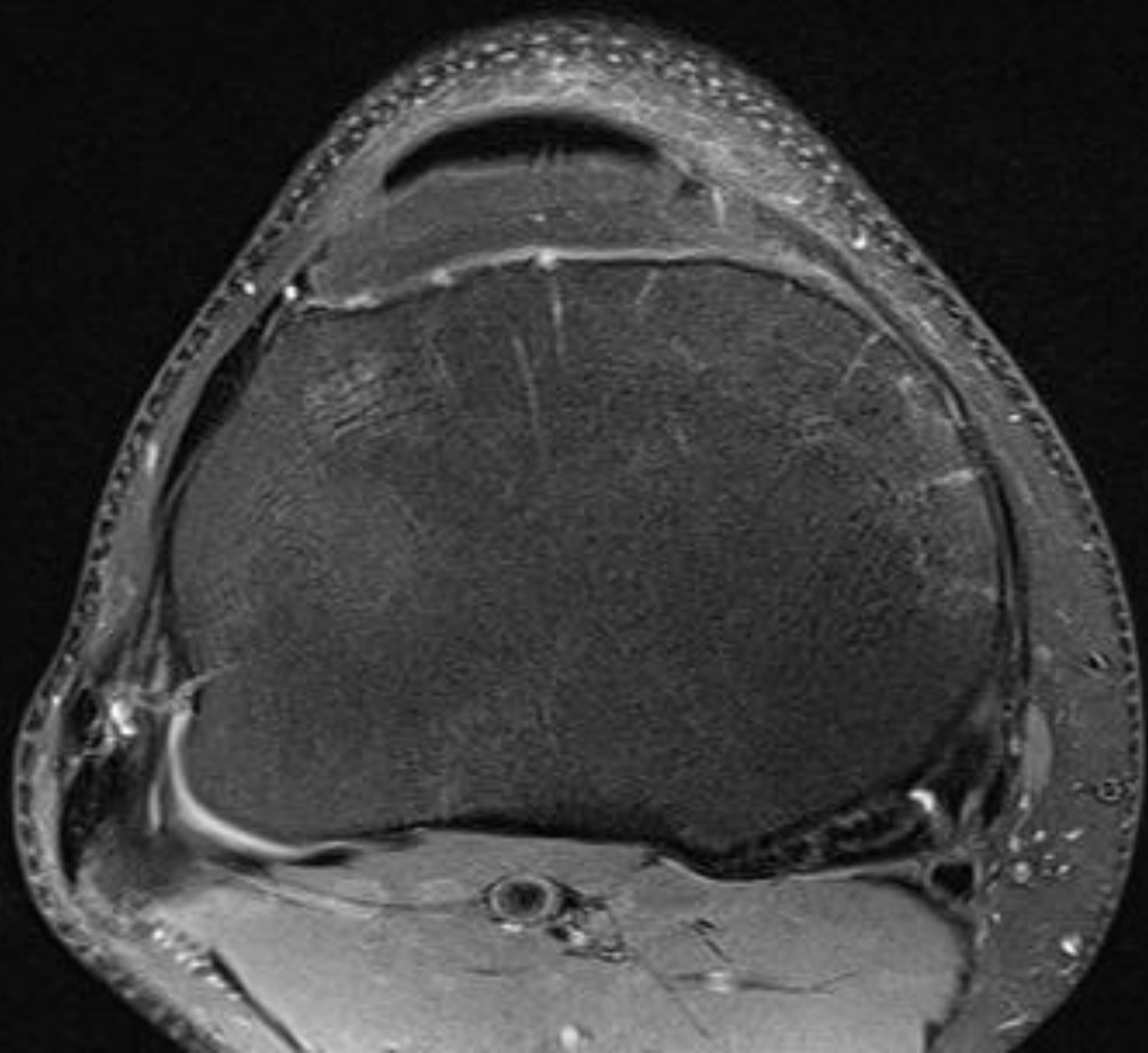


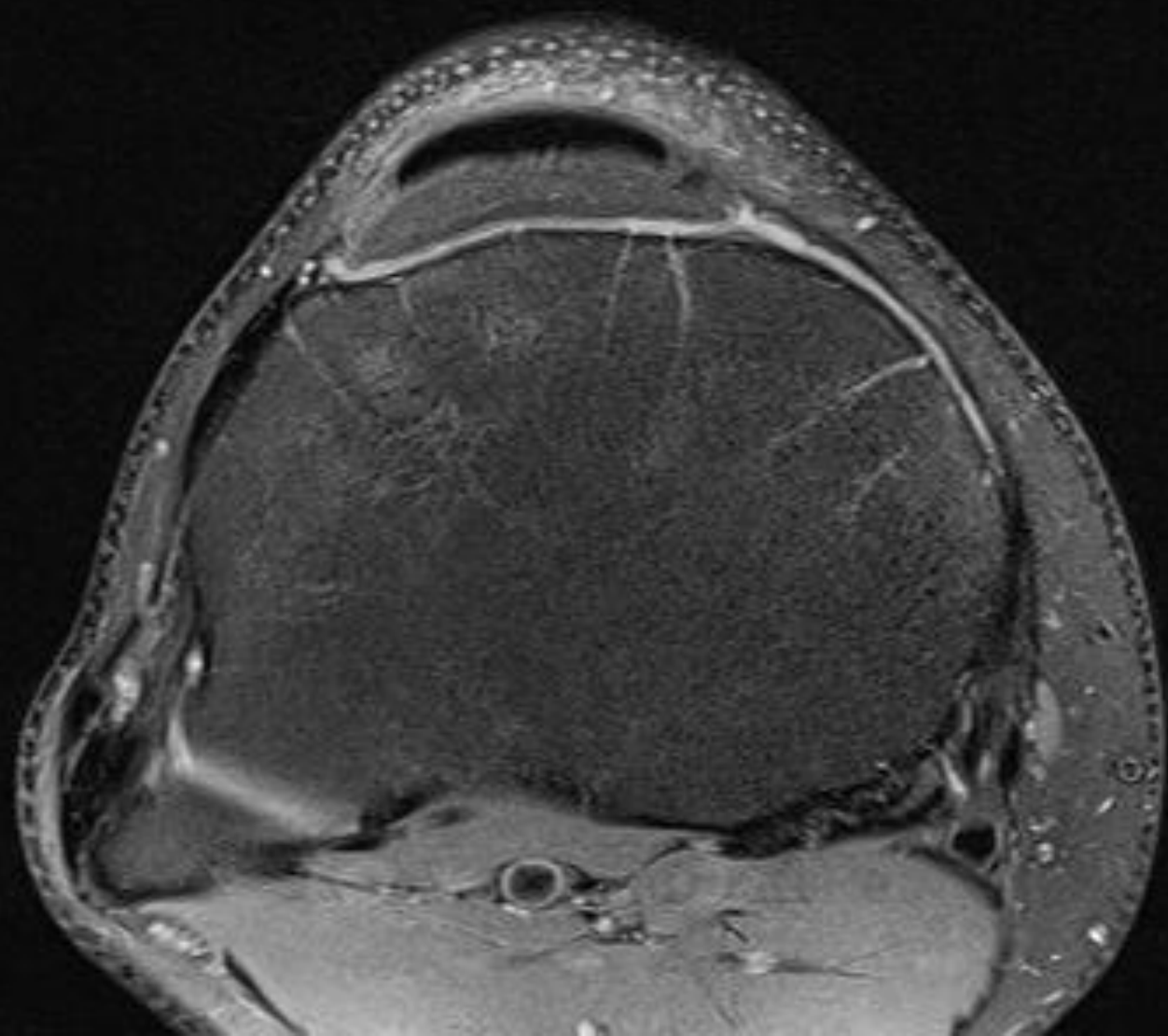


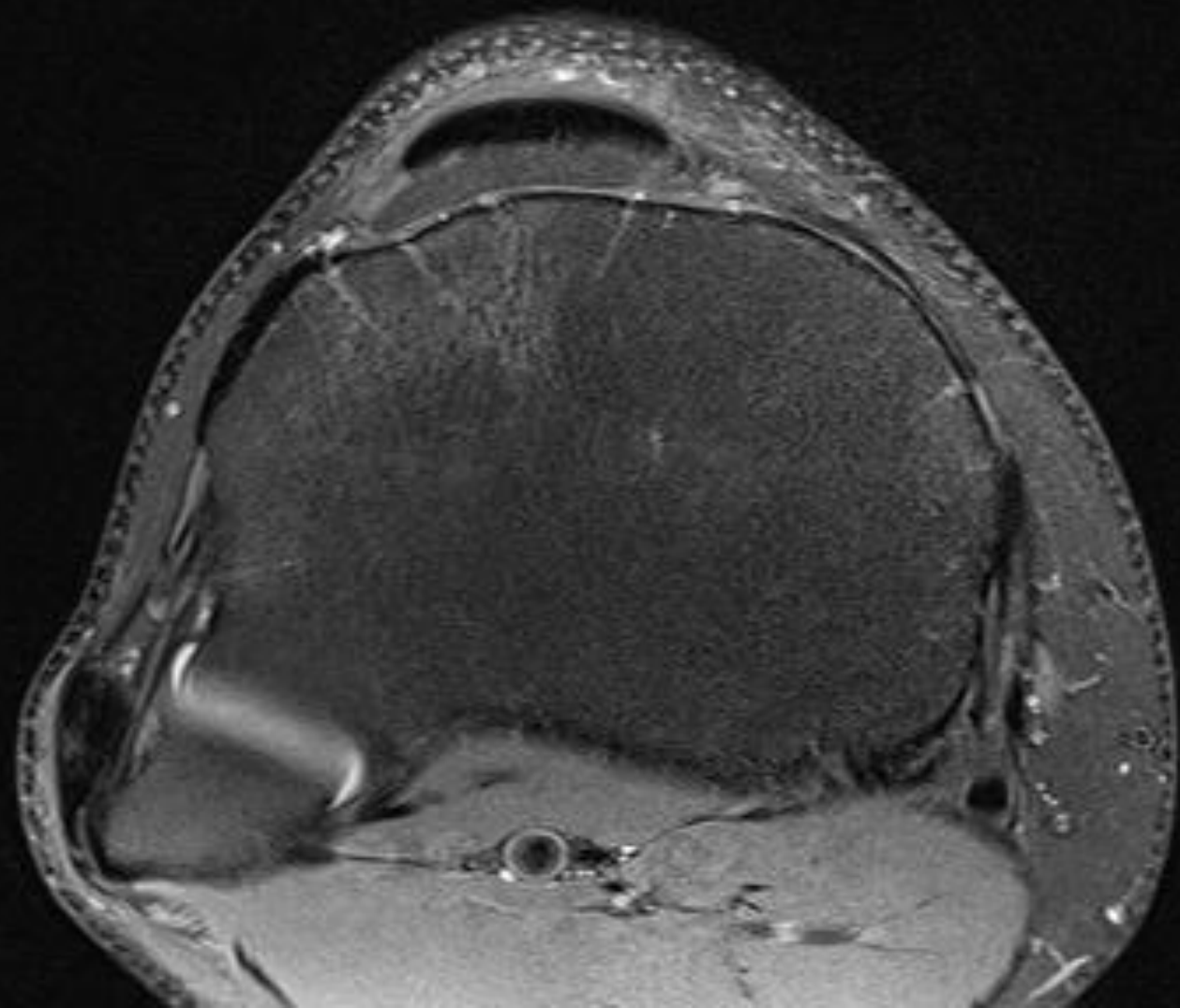


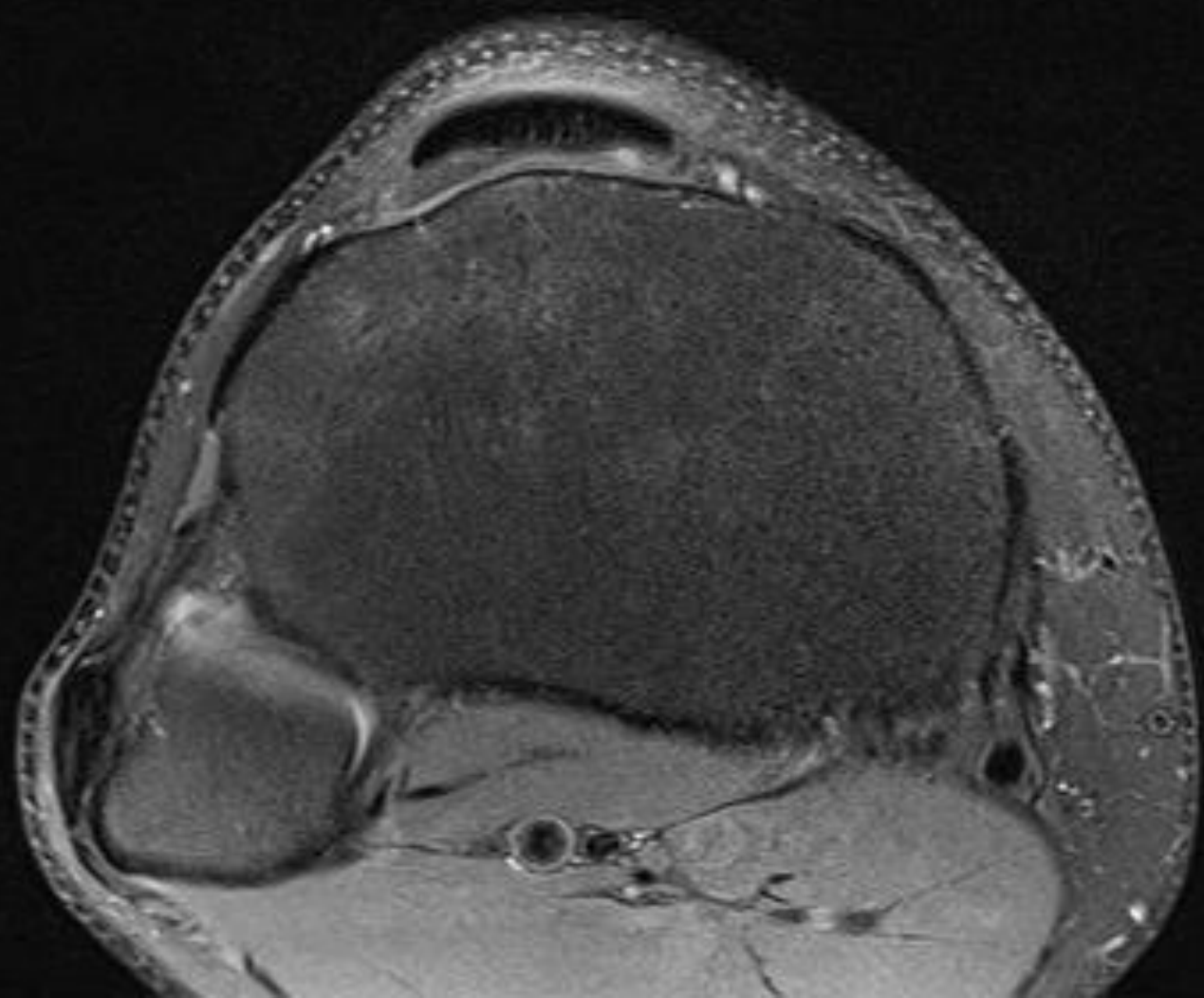




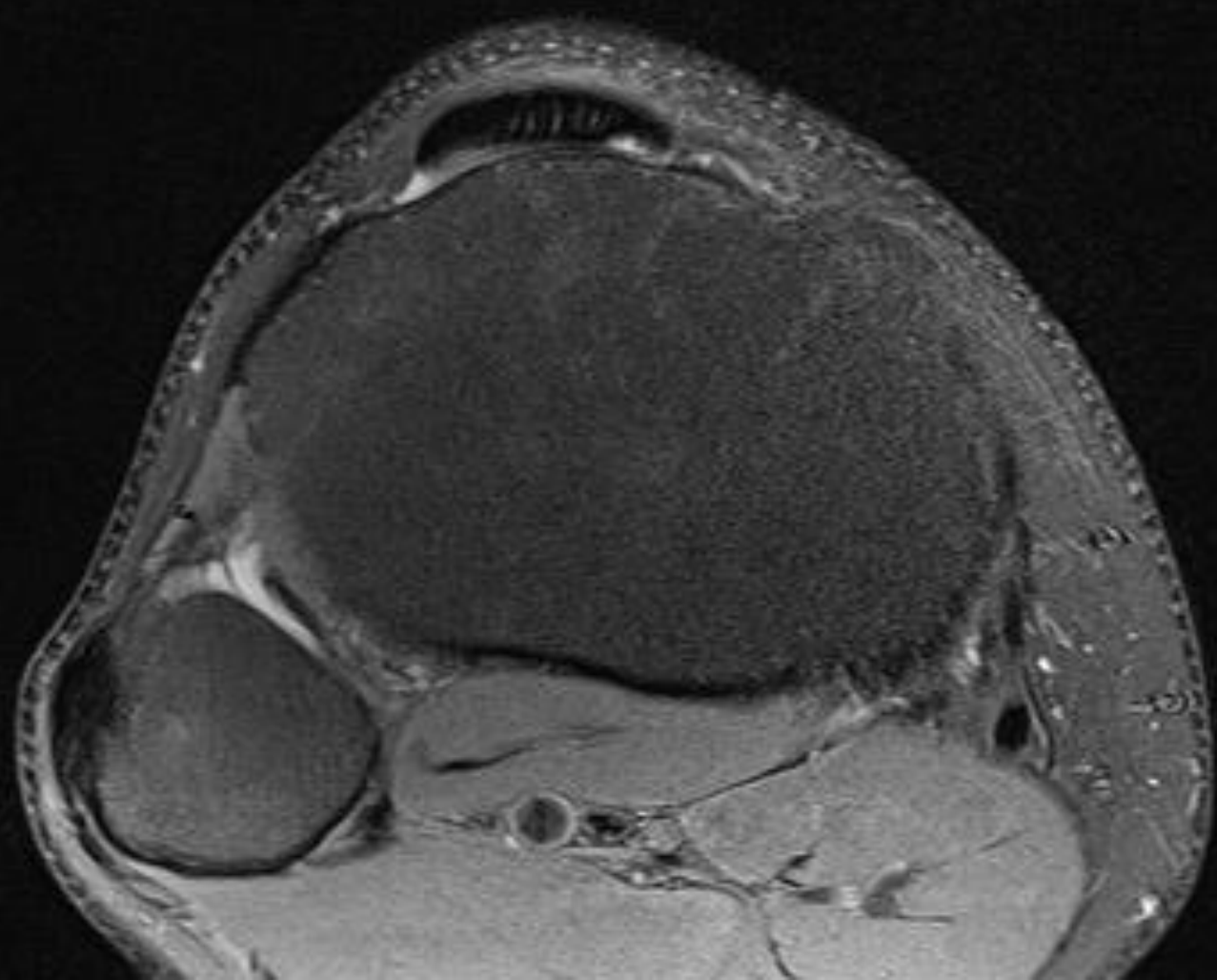


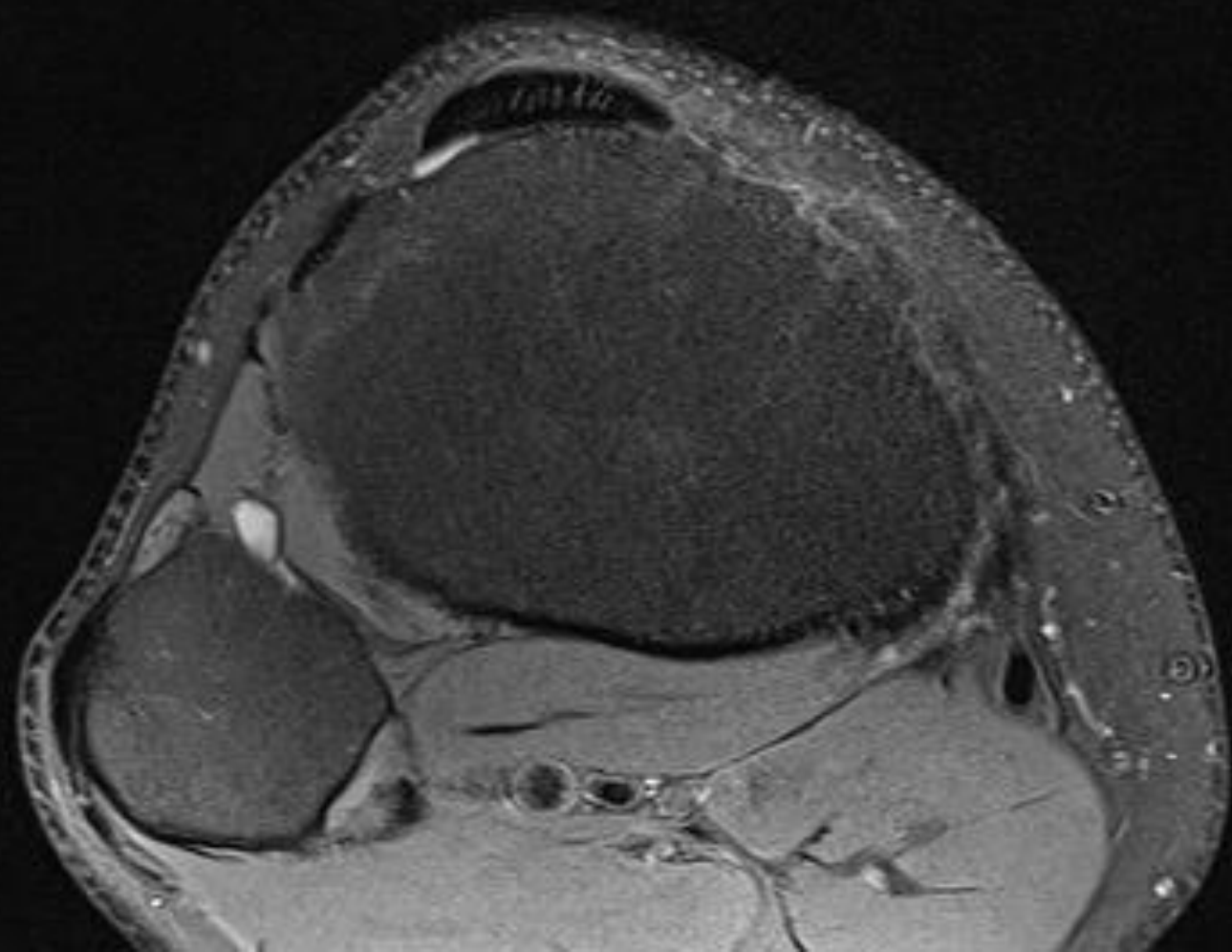


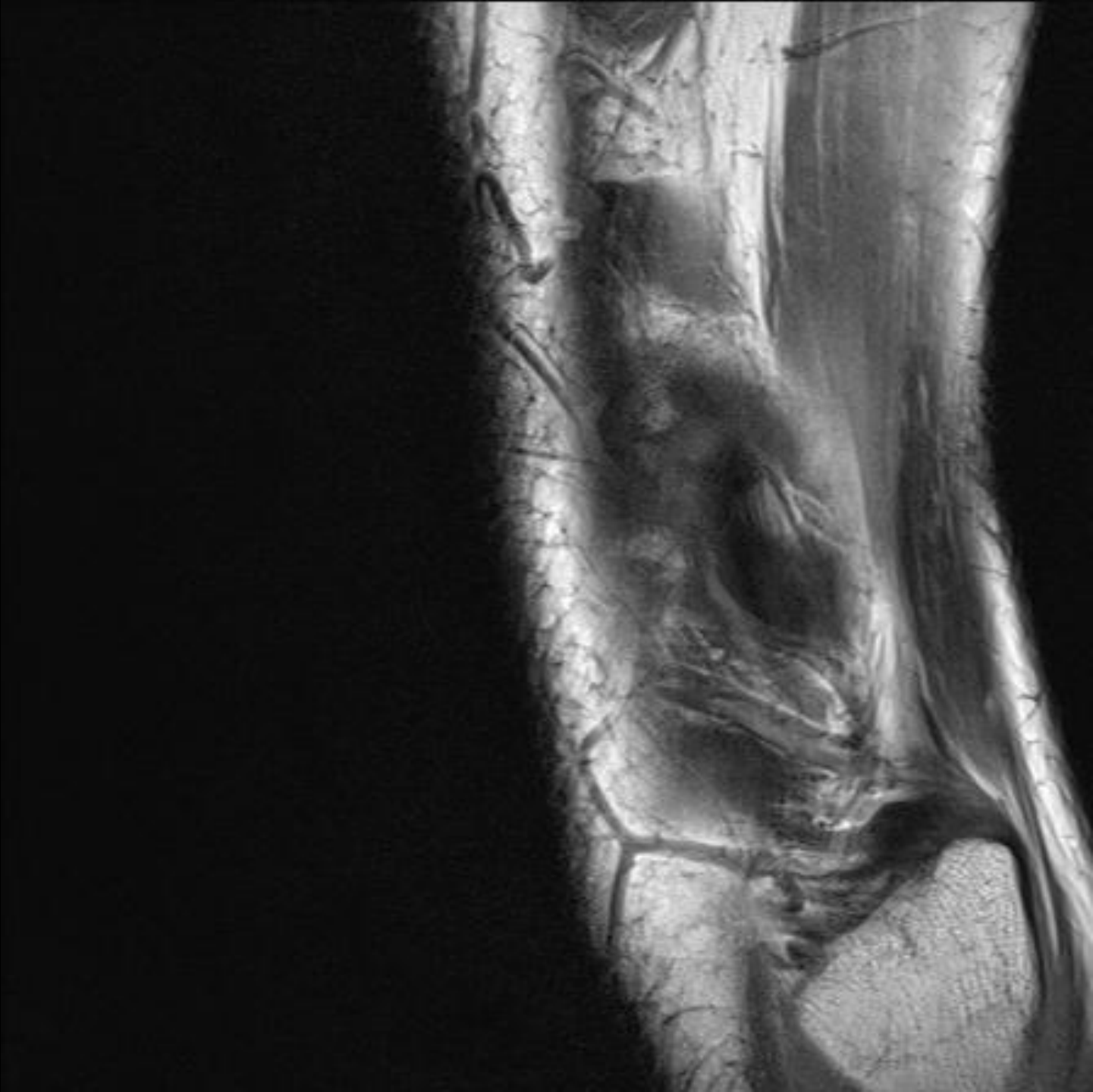


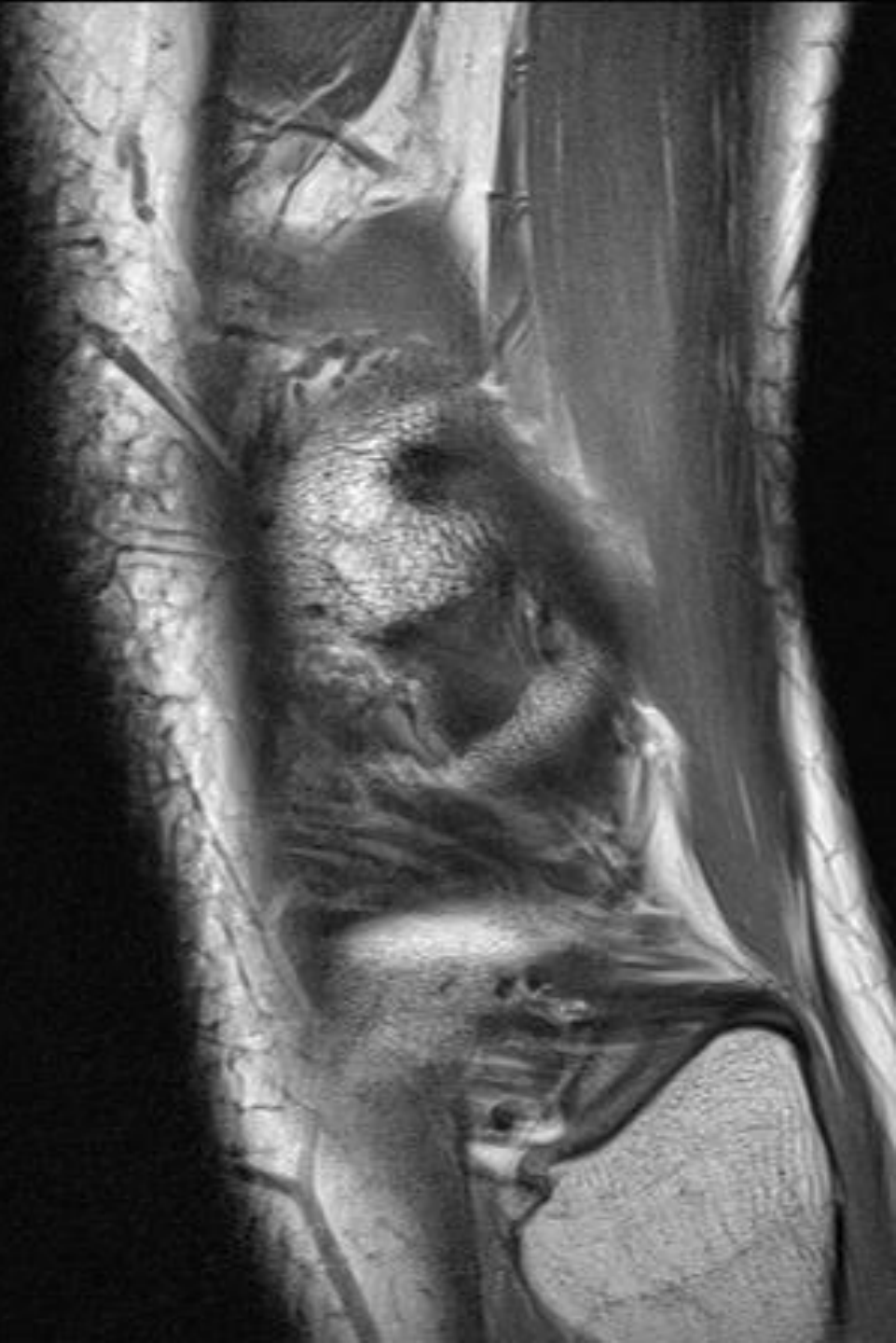






































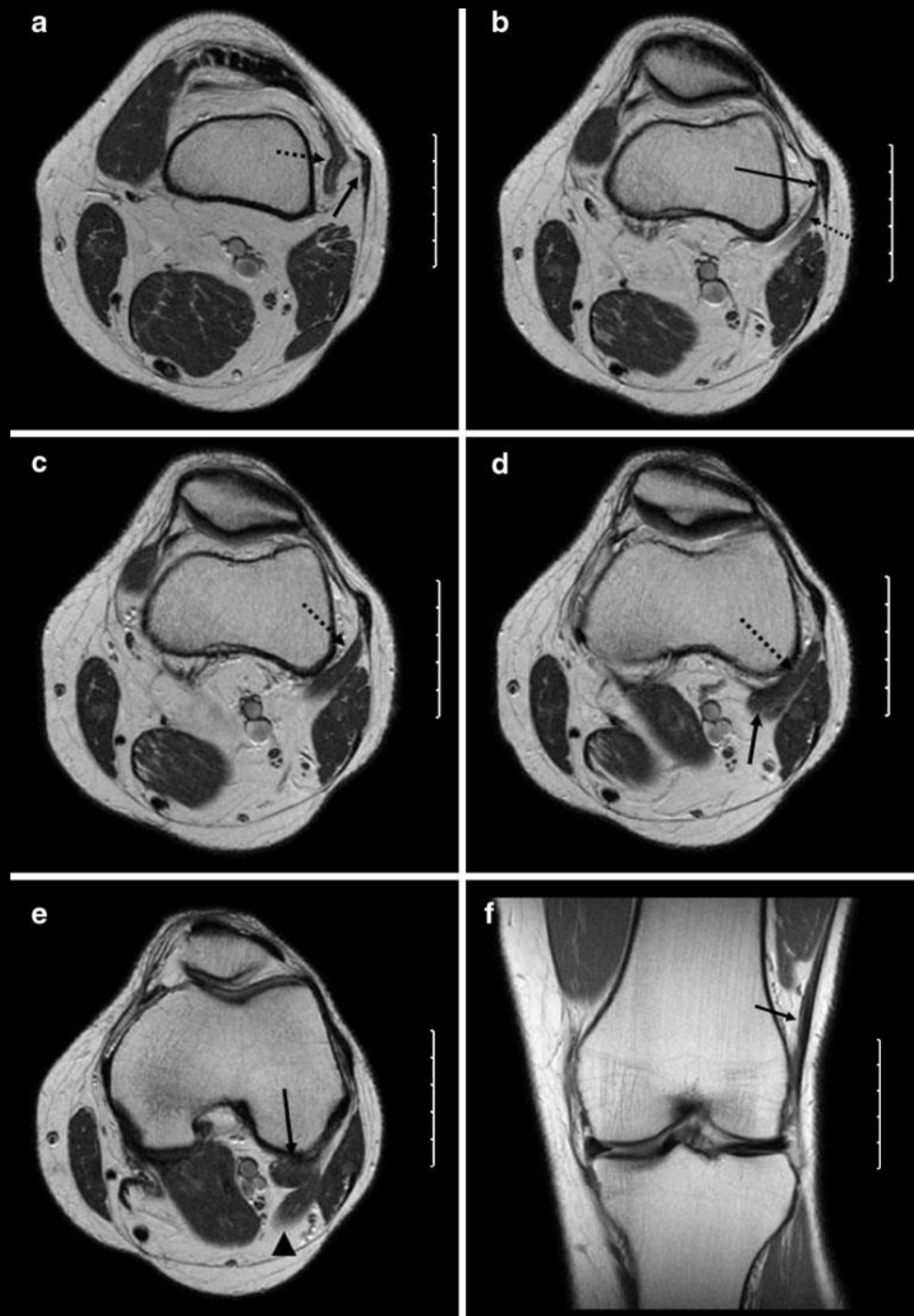






# Accessory Plantaris Muscle: Anatomy and Prevalence

Richard Joseph Herzog, MD, FACR





# Accessory Plantaris Muscle: Anatomy and Prevalence

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Original Article

# **MR imaging assessment of the lateral head of the gastrocnemius muscle: prevalence of segmental anomalous origins in children and young adults**

Hee Kyung Kim<sup>1</sup>, Tal Laor<sup>1</sup>✉ and Judy M. Racadio<sup>1</sup>

Department of Radiology, Cincinnati Children's Hospital Medical Center, 3333 Burnet Ave., Cincinnati, OH 45229-3039, USA

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- The site of origin of the lateral head of the gastrocnemius muscle was evaluated and categorized as either normal, lateral segmental anomalous origin (LSAO), or medial accessory anomalous origin (MAAO).
- The site of origin was defined as normal when the lateral head of the gastrocnemius muscle originated as a single bundle from the posterior aspect of the lateral femoral condyle.
- LSAO was identified when a segmental bundle of the lateral head of the gastrocnemius muscle originated from the iliotibial tract.
- MAAO was identified when an accessory muscle bundle originated from the posterior and mid- to medial aspect of the lateral femoral condyle, lateral to the popliteal vessels, and then merged with the body of the lateral head of the gastrocnemius muscle.
- The MAAO anomaly has also been called a “third head” in anatomic studies, the third head has been shown to be the most common variation of the gastrocnemius muscle, with a frequency of 2.9–5.5%

- 465 patients underwent knee MR imaging examinations
- Anatomic variations of the lateral head of the gastrocnemius were noted on MRI in 16 of the 465 patients (3.4%)
- LSAO of the lateral head was identified in nine patients (1.9%)
- MAAO of the lateral head of the gastrocnemius muscle was seen in seven patients (1.5%).

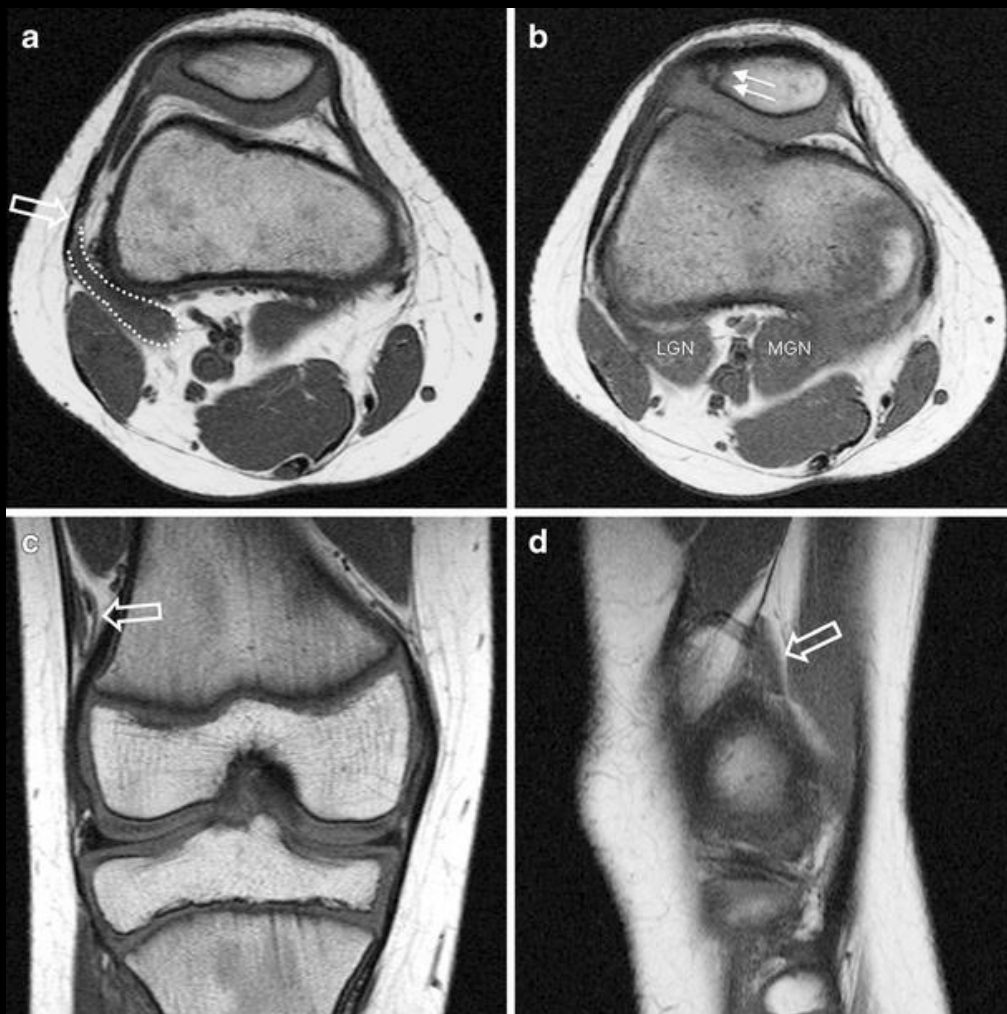
Original Article

# MR imaging assessment of the lateral head of the gastrocnemius muscle: prevalence of segmental anomalous origins in children and young adults

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# LSAO



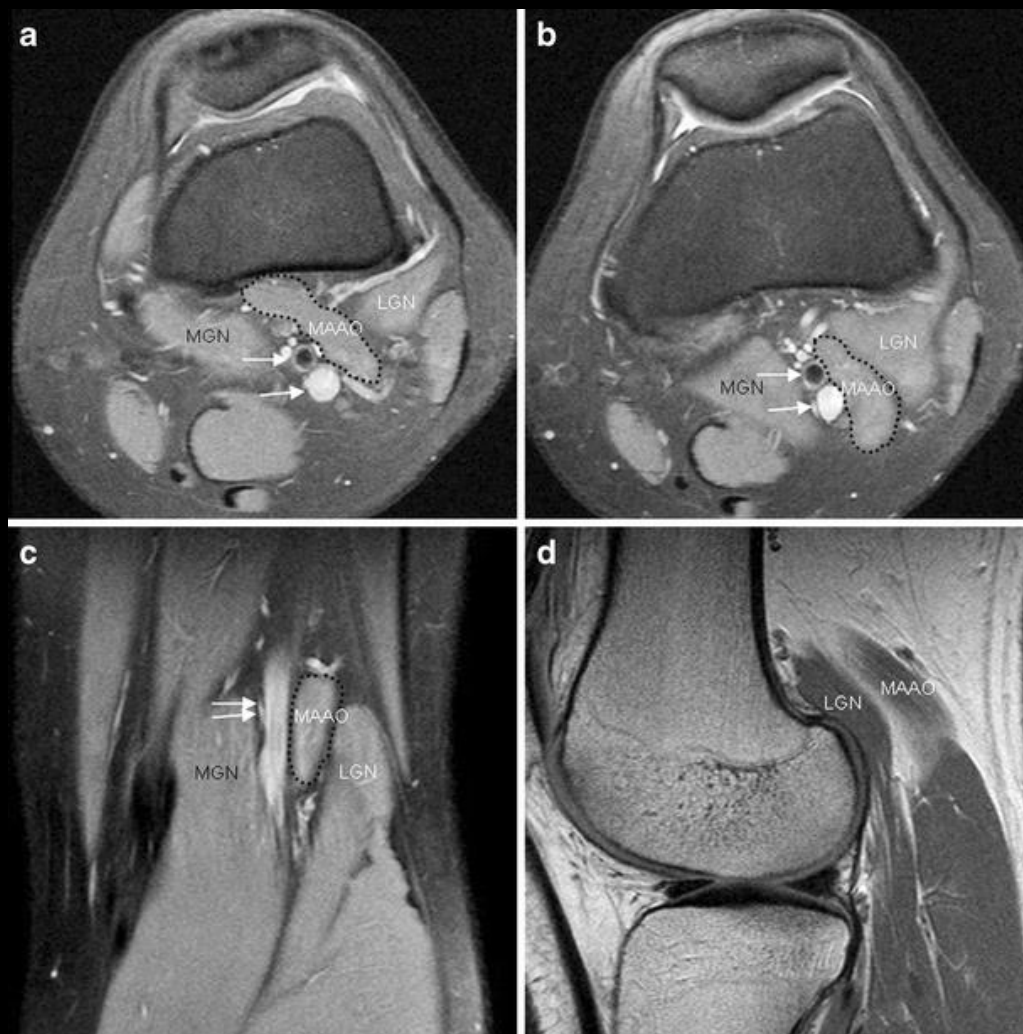
Original Article

## MR imaging assessment of the lateral head of the gastrocnemius muscle: prevalence of segmental anomalous origins in children and young adults

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# MAAO





- Five of nine LSAO patients had symptoms referable to or abnormalities of the patella.

*Int. J. Morphol.*,  
28(1):255-258, 2010.

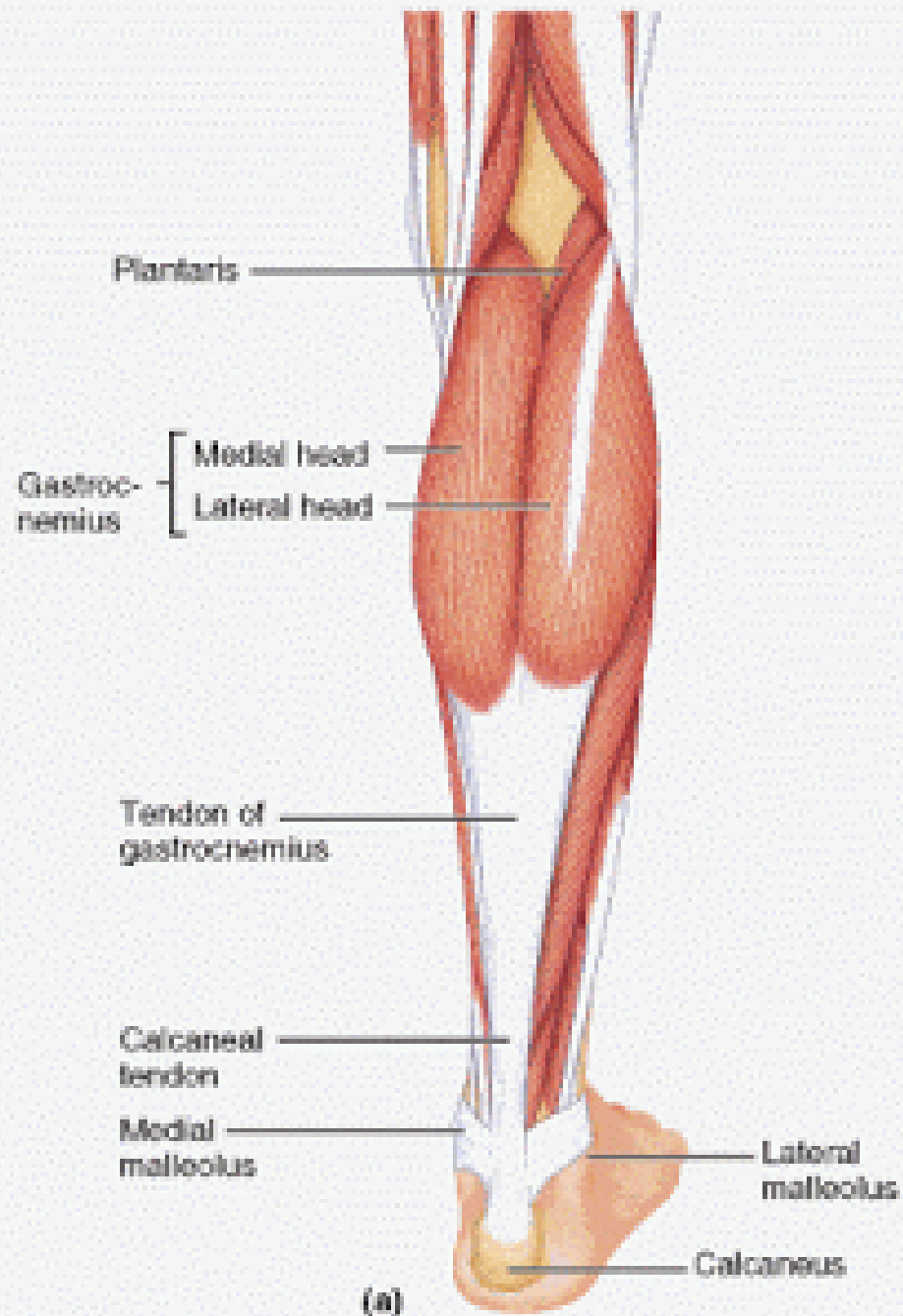
## **The Occurrence of the Plantaris Muscle and its Muscle-Tendon Relationship in Adult Human Cadavers**

**Presencia de Músculos Plantares y su Relación Musculotendinosa en Cadáveres Humanos Adultos**

**\*José Aderval Aragão; \*\*Francisco Prado Reis; \*\*\*Danilo Ribeiro Guerra & \*\*\*\*Richard Halti Cabral**

- The plantaris muscle is a small muscle with a short belly and long thin tendon that forms part of the posterior superficial compartment of the leg, together with the soleus and gastrocnemius muscles. From an anatomical point of view, it is a fusiform muscle in which the muscle belly occupies a length of 5 to 10 cm. Believed that the plantaris muscle is an accessory muscle and only vestigial in humans, and that it might be absent in 7 to 20% of individuals.

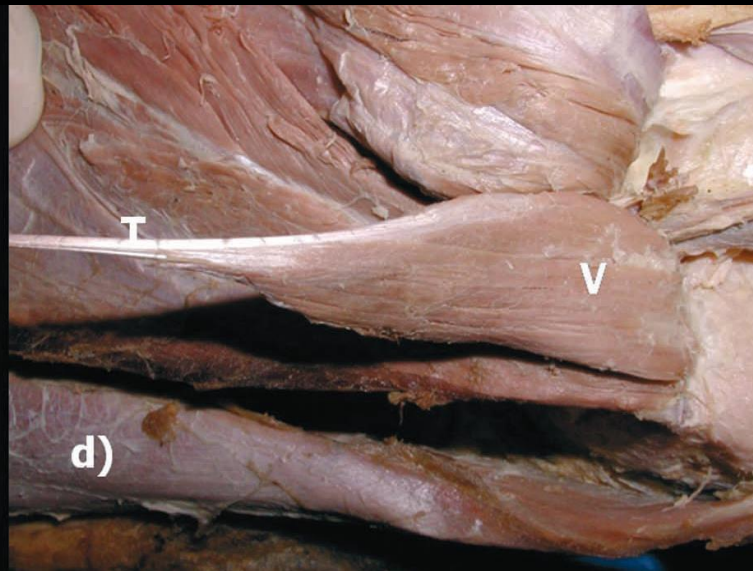
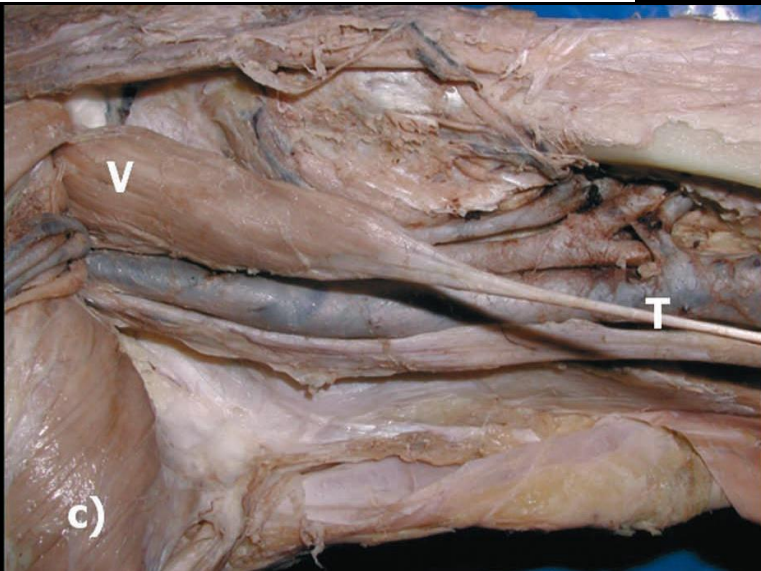
- The plantaris muscle was present in all of the cadavers dissected. Its muscle bundles were oriented laterally medially or convergently towards the tendon . Its proximal insertion was into the lateral supracondylar line of the femur, superiorly and medially to the head of the gastrocnemius muscle. Its tendon passed obliquely downwards between the gastrocnemius and soleus to insert into the medial face of the calcaneus.



## The Occurrence of the Plantaris Muscle and its Muscle-Tendon Relationship in Adult Human Cadavers

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# References

1. Kim, H. Laor, T. Racadio, J. MR imaging assessment of the lateral head of the gastrocnemius muscle: prevalence of segmental anomalous origins in children and young adults. *Ped Radiology*. Oct 2008.
2. Herzog, R. Accessory Plantaris Muscle: Anatomy and Prevalence. *HSSJ*. 2011. 7:52-56.