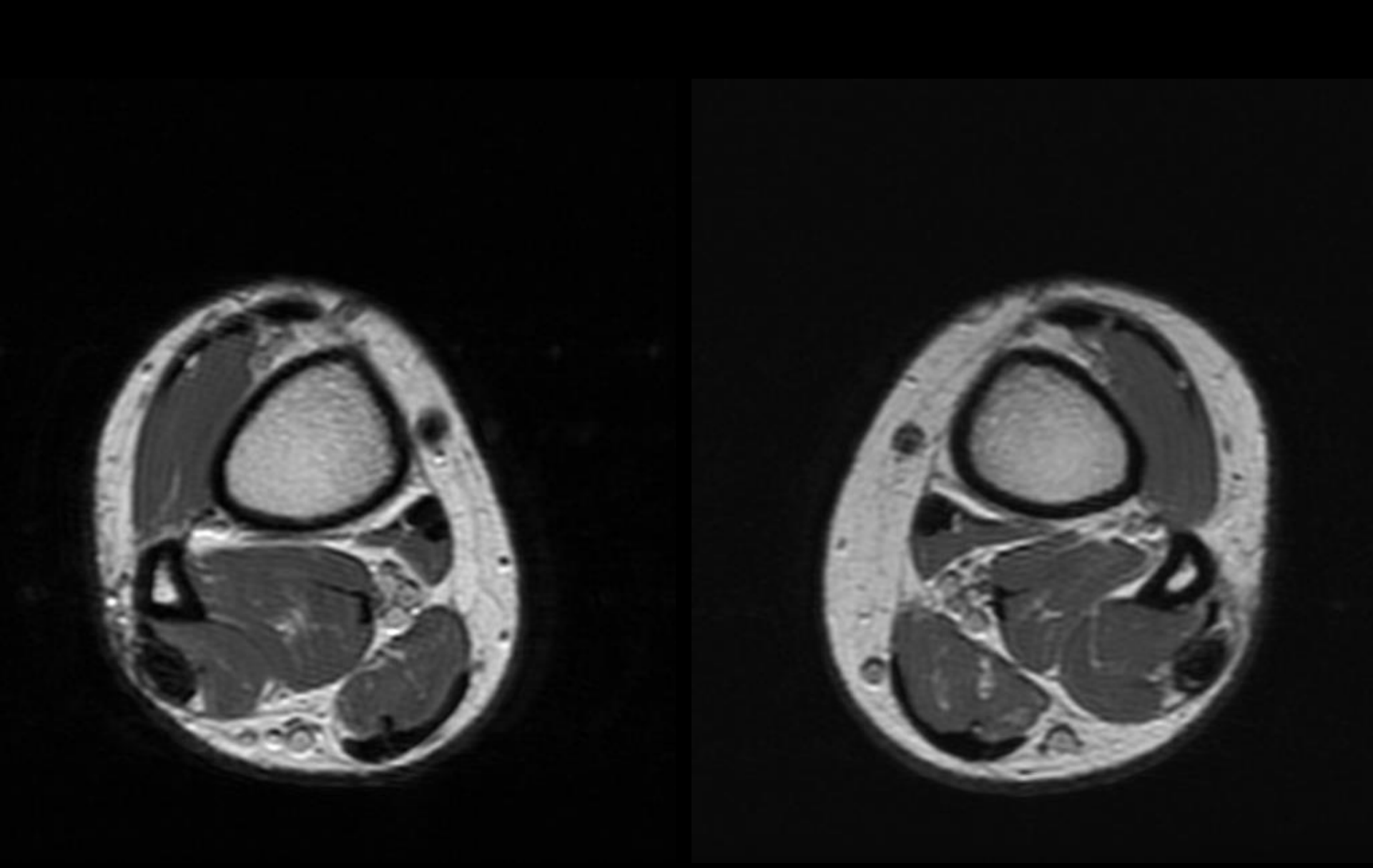
48 yo male

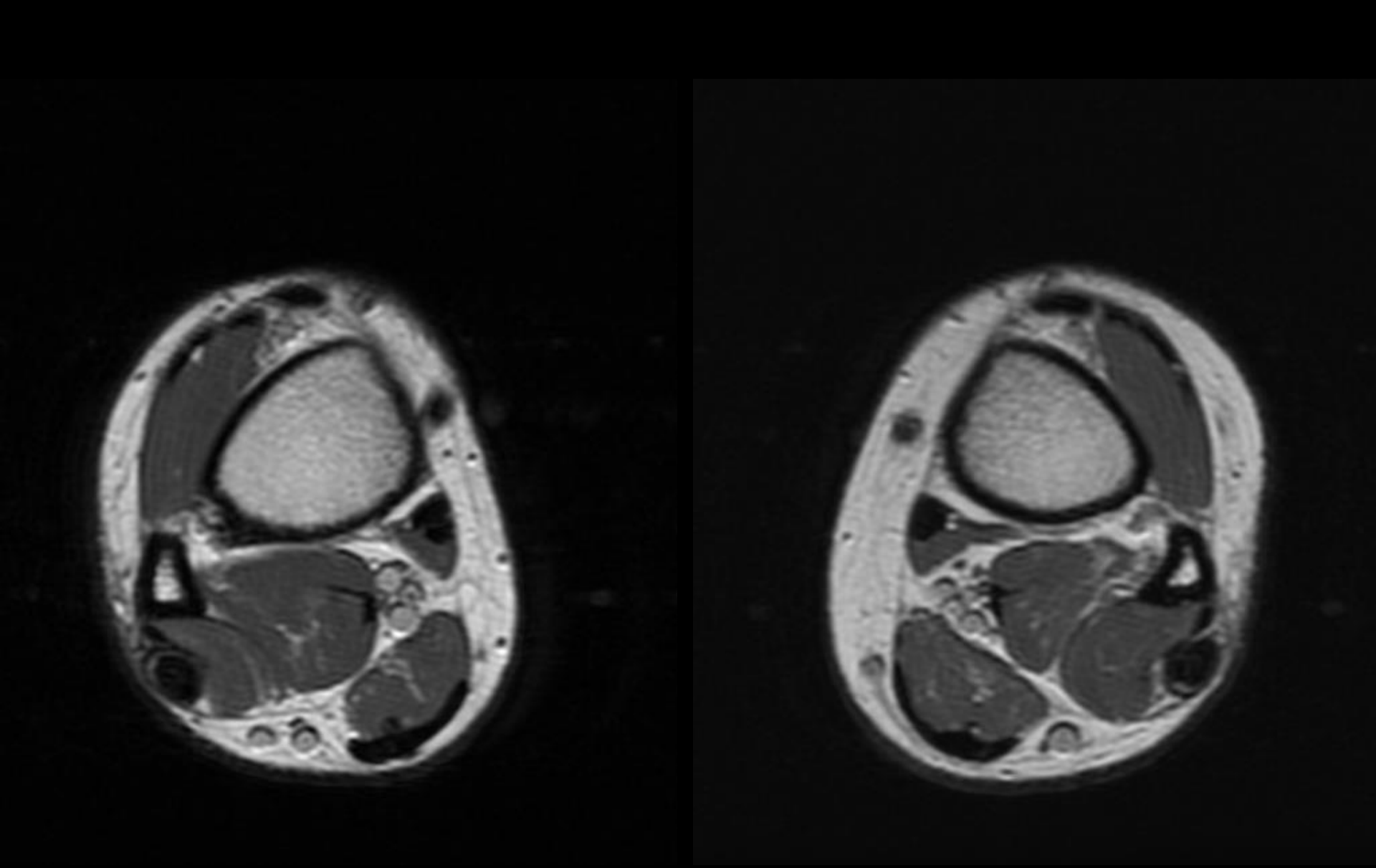
Pain on left ankle

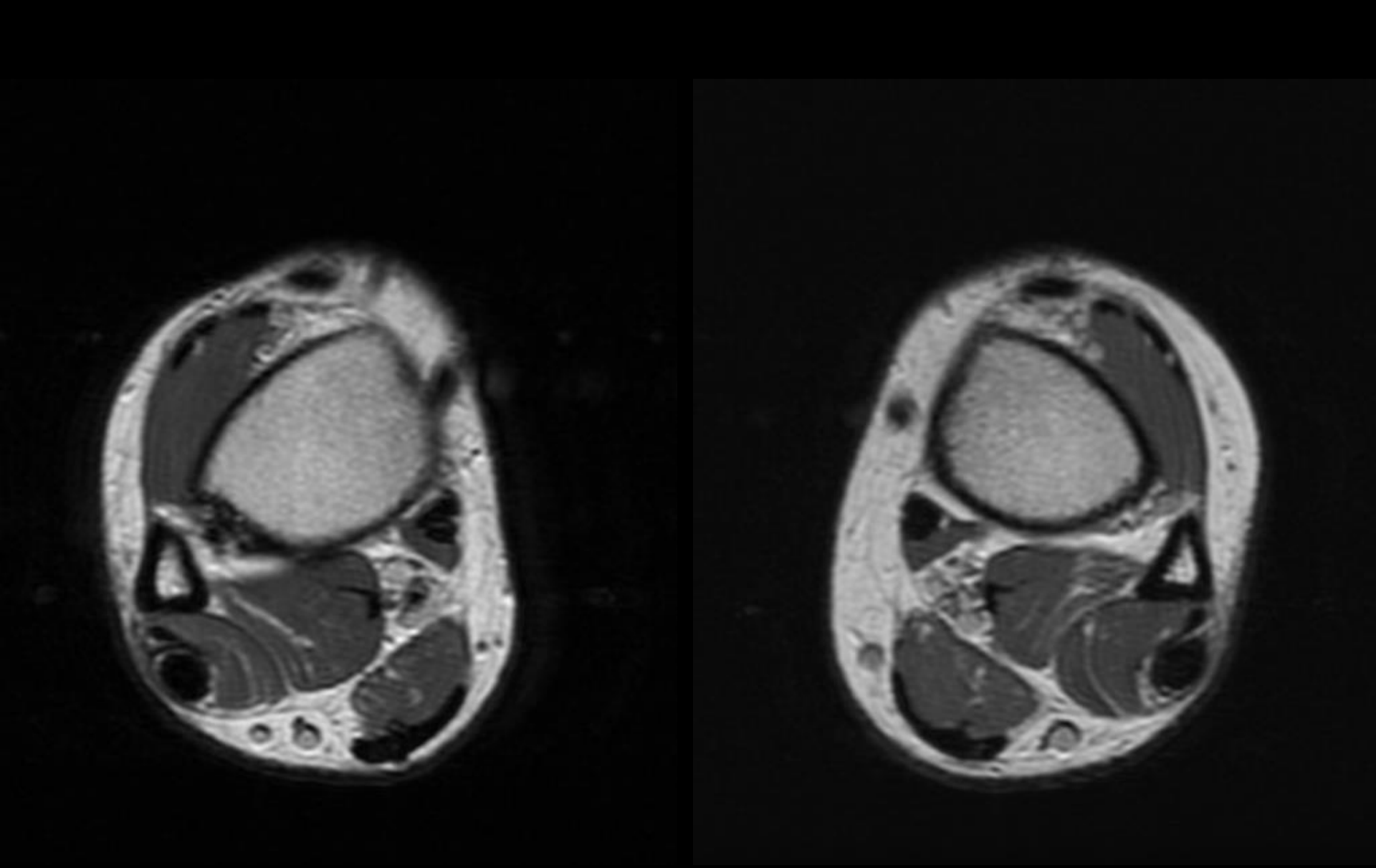
h/o tendon repair on right ankle
(prior contralateral ankle MRI)

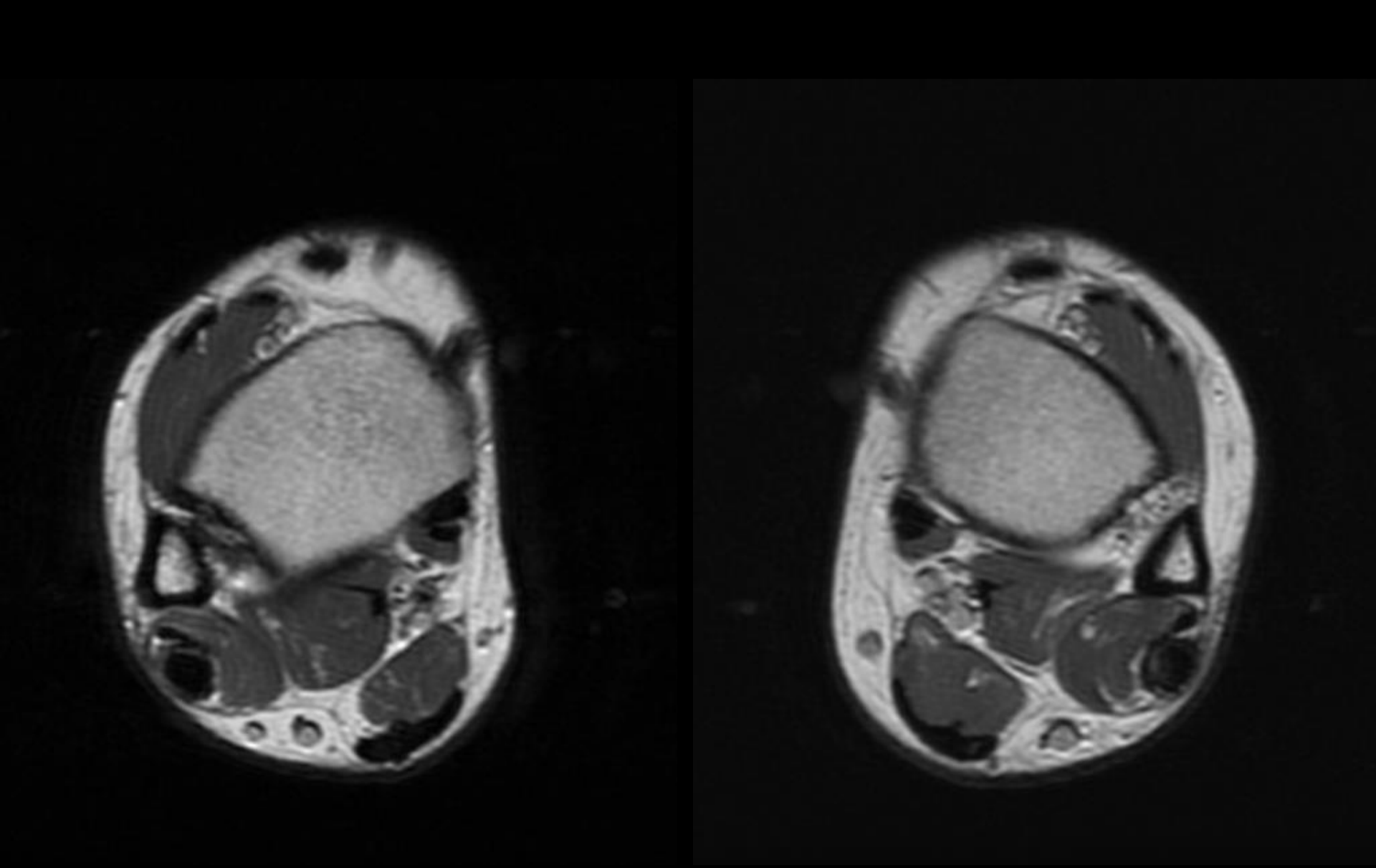


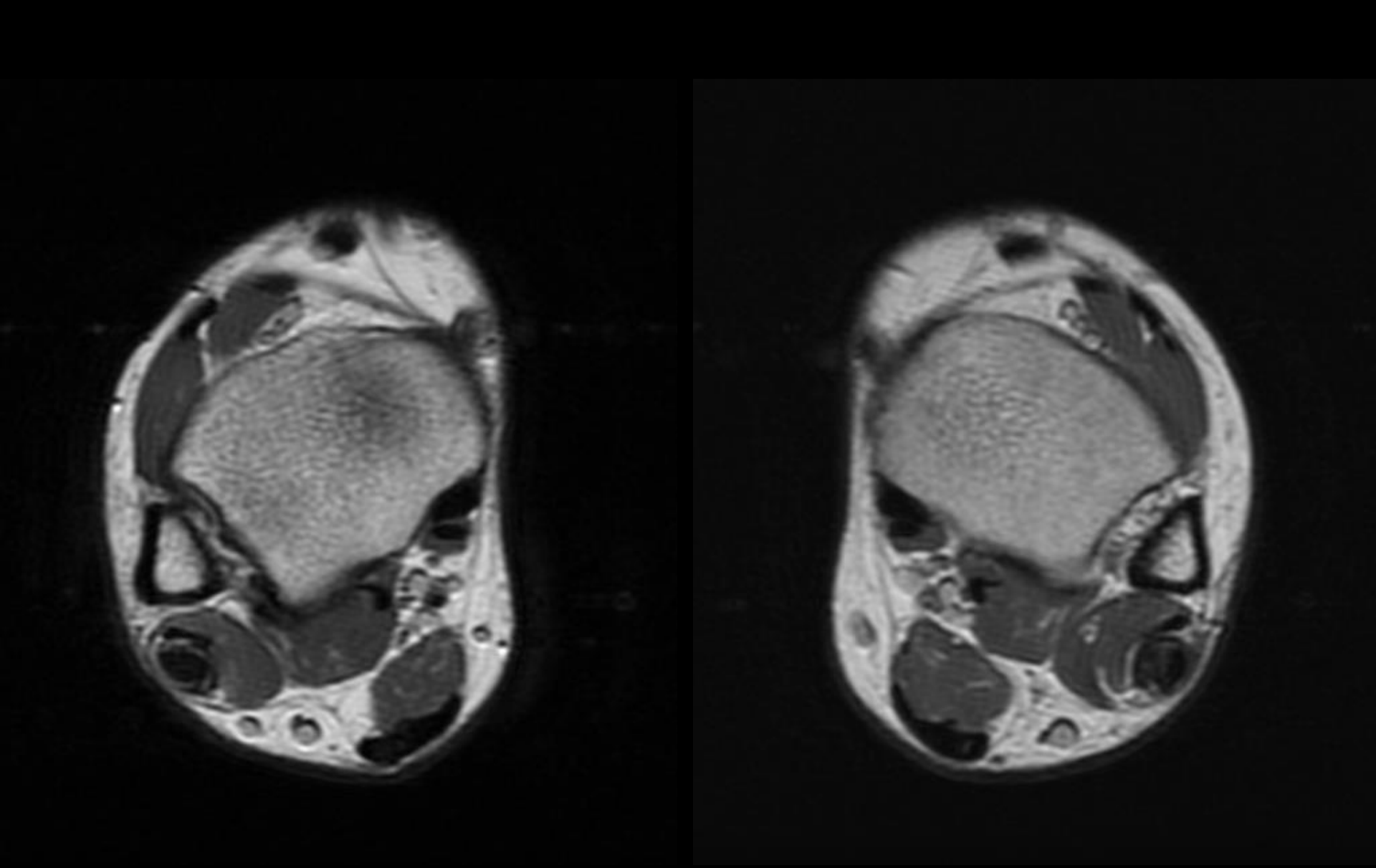
Right Ankle

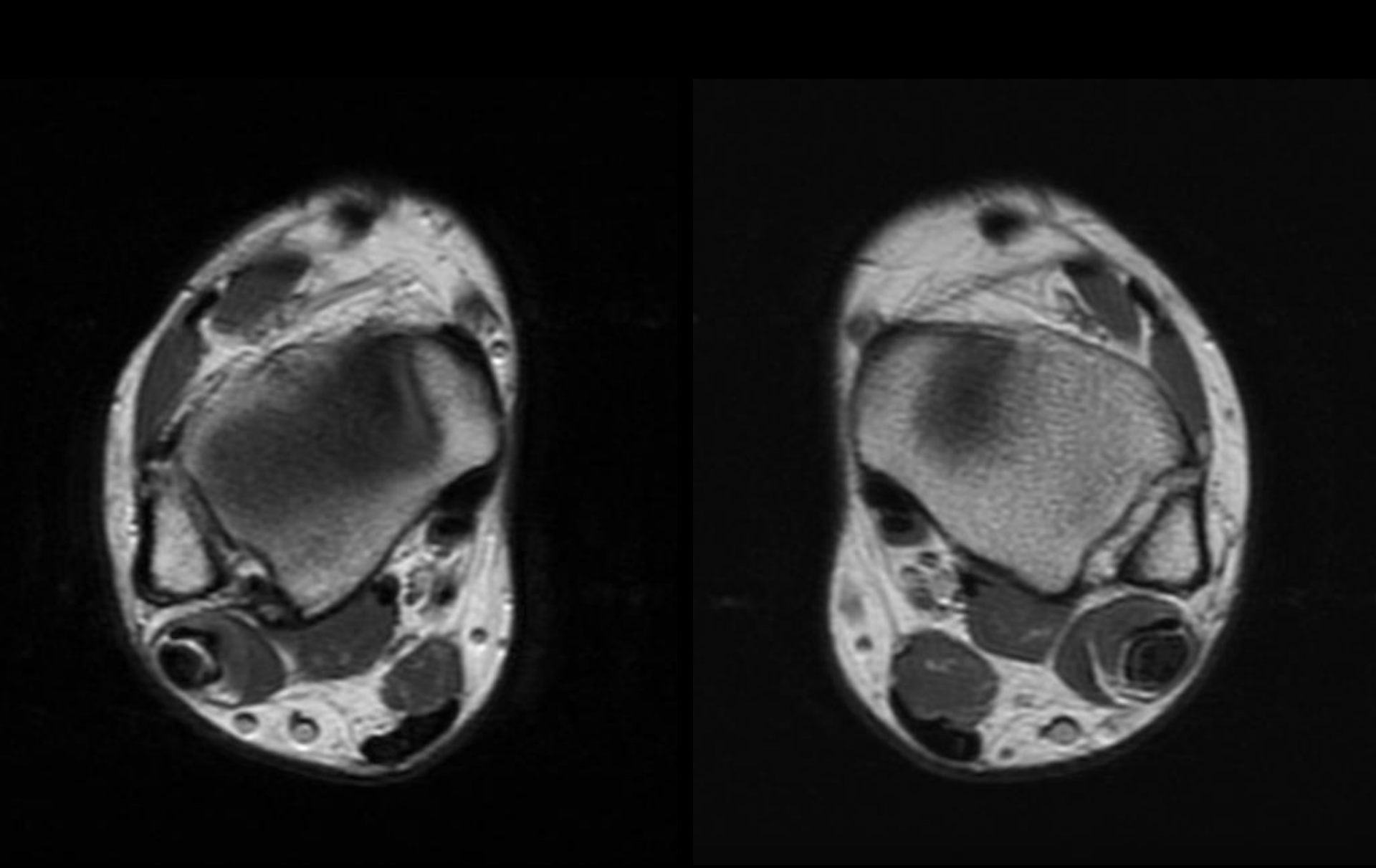
Left Ankle

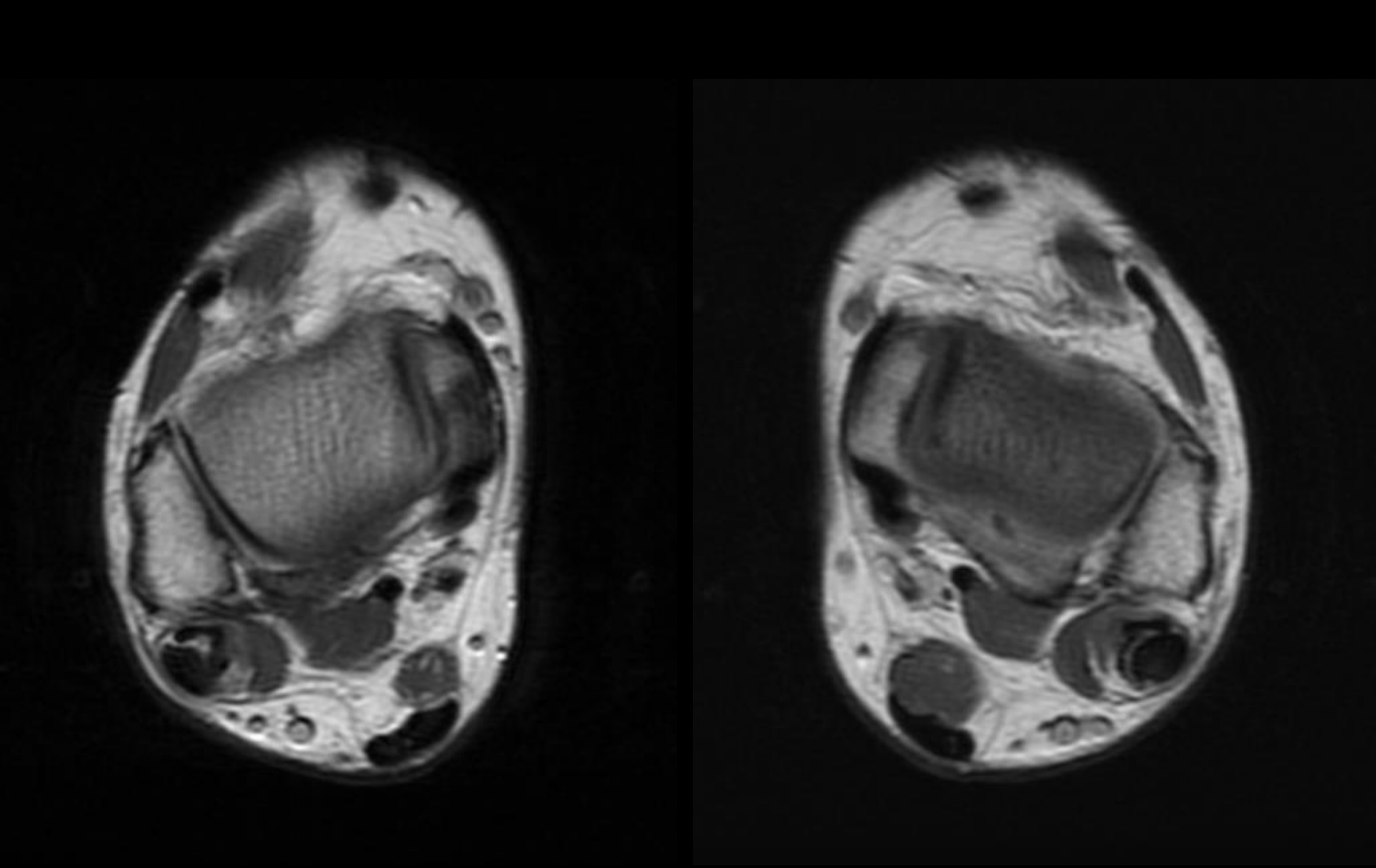


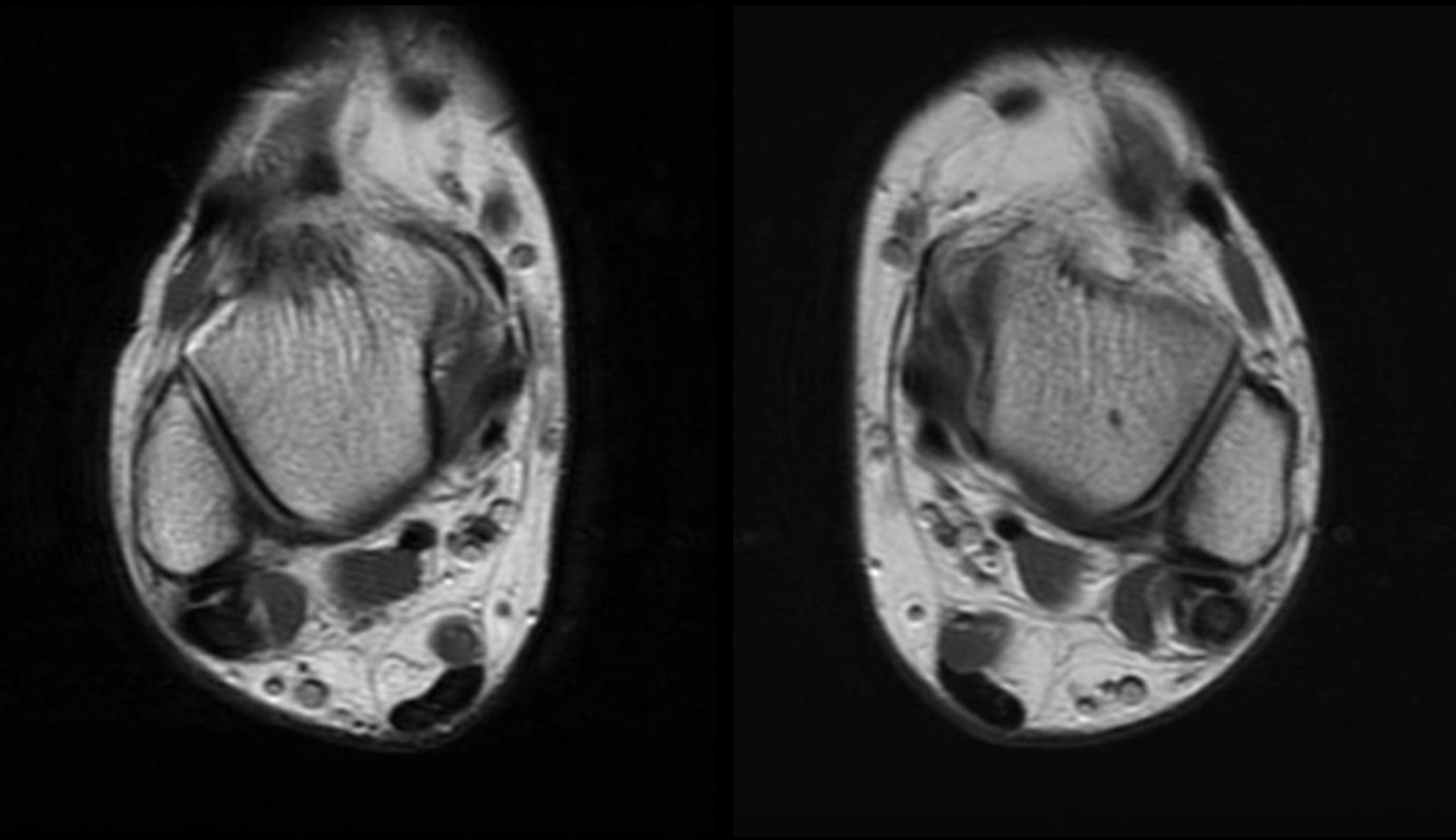


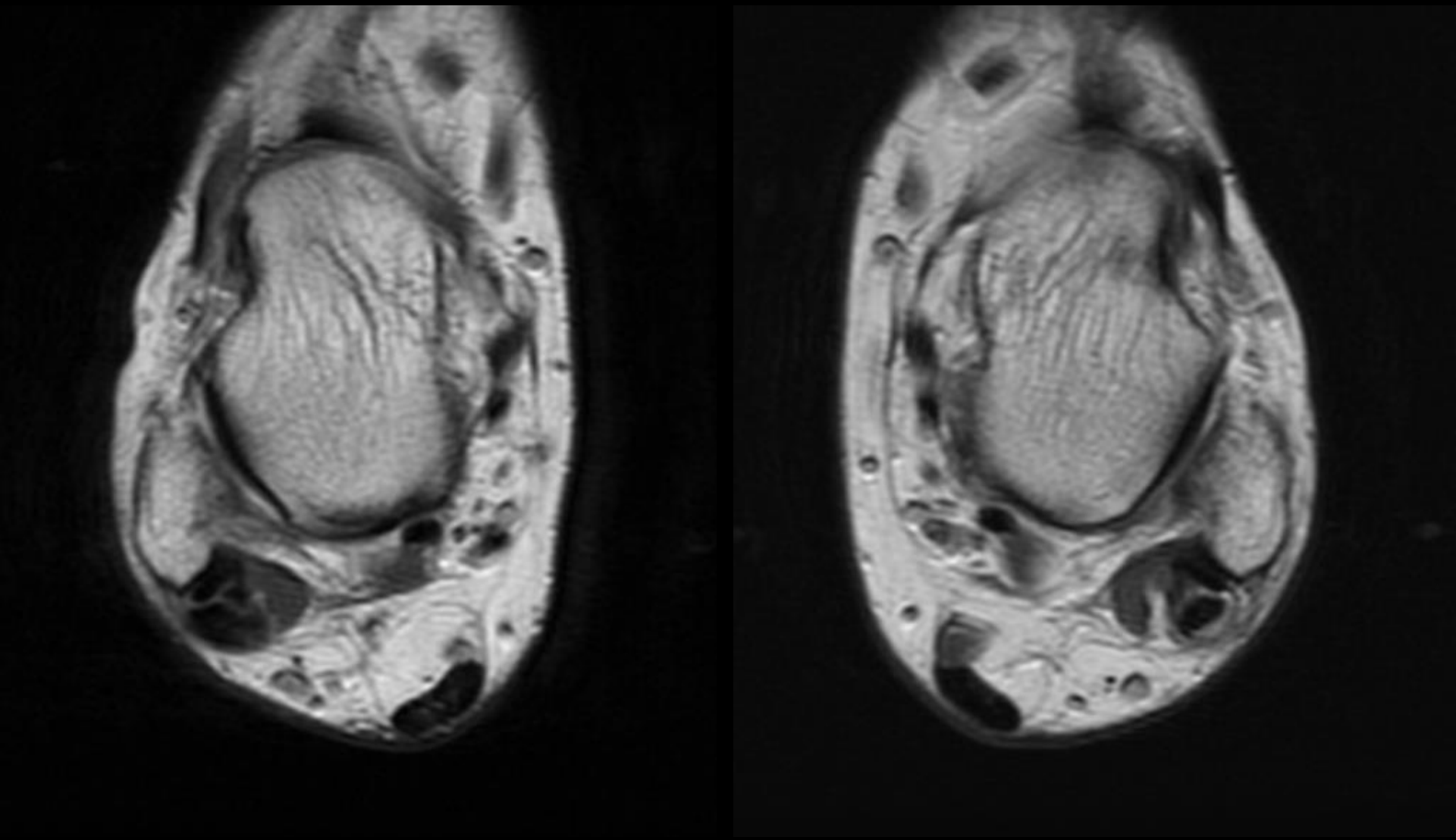


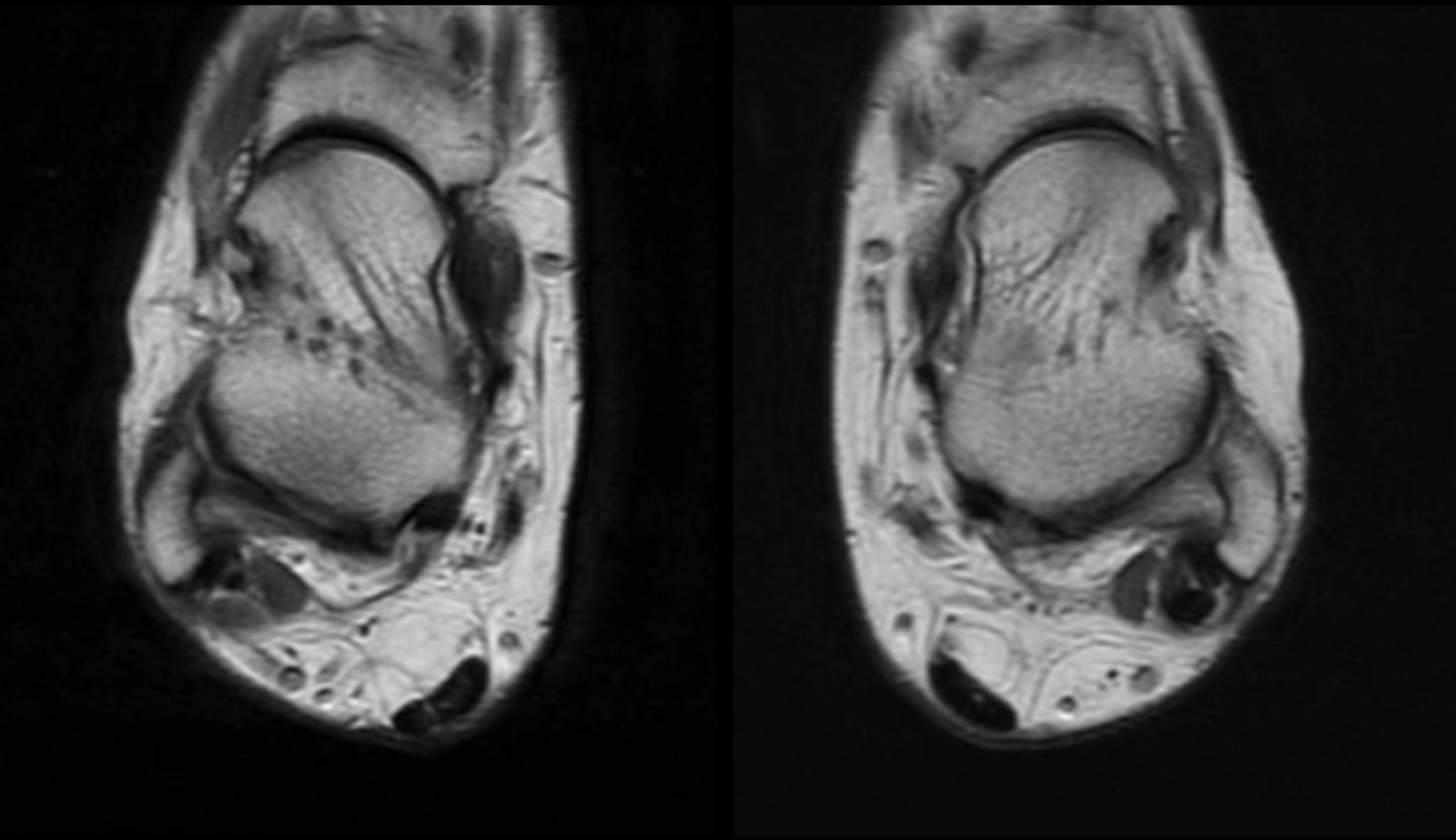


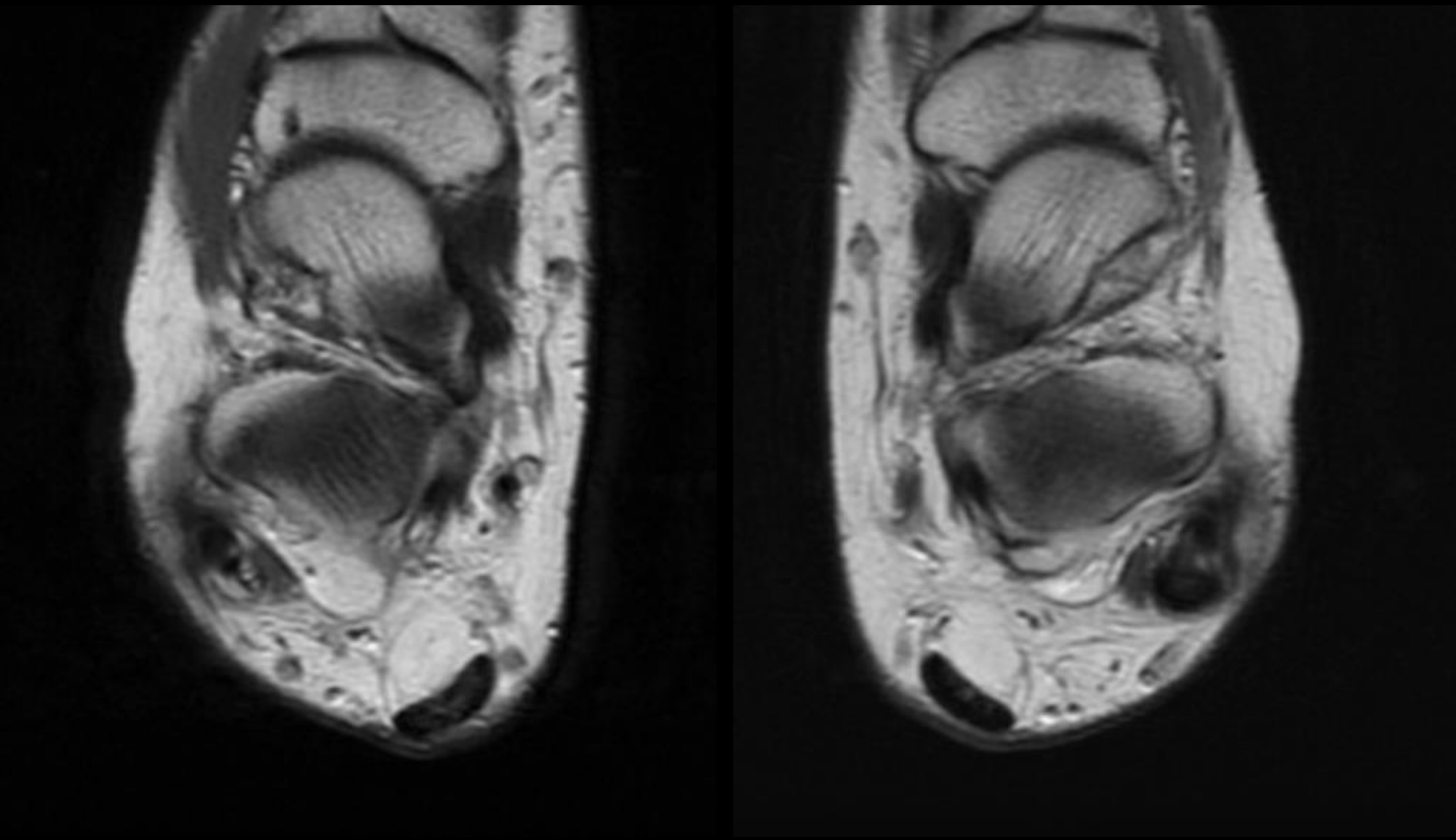


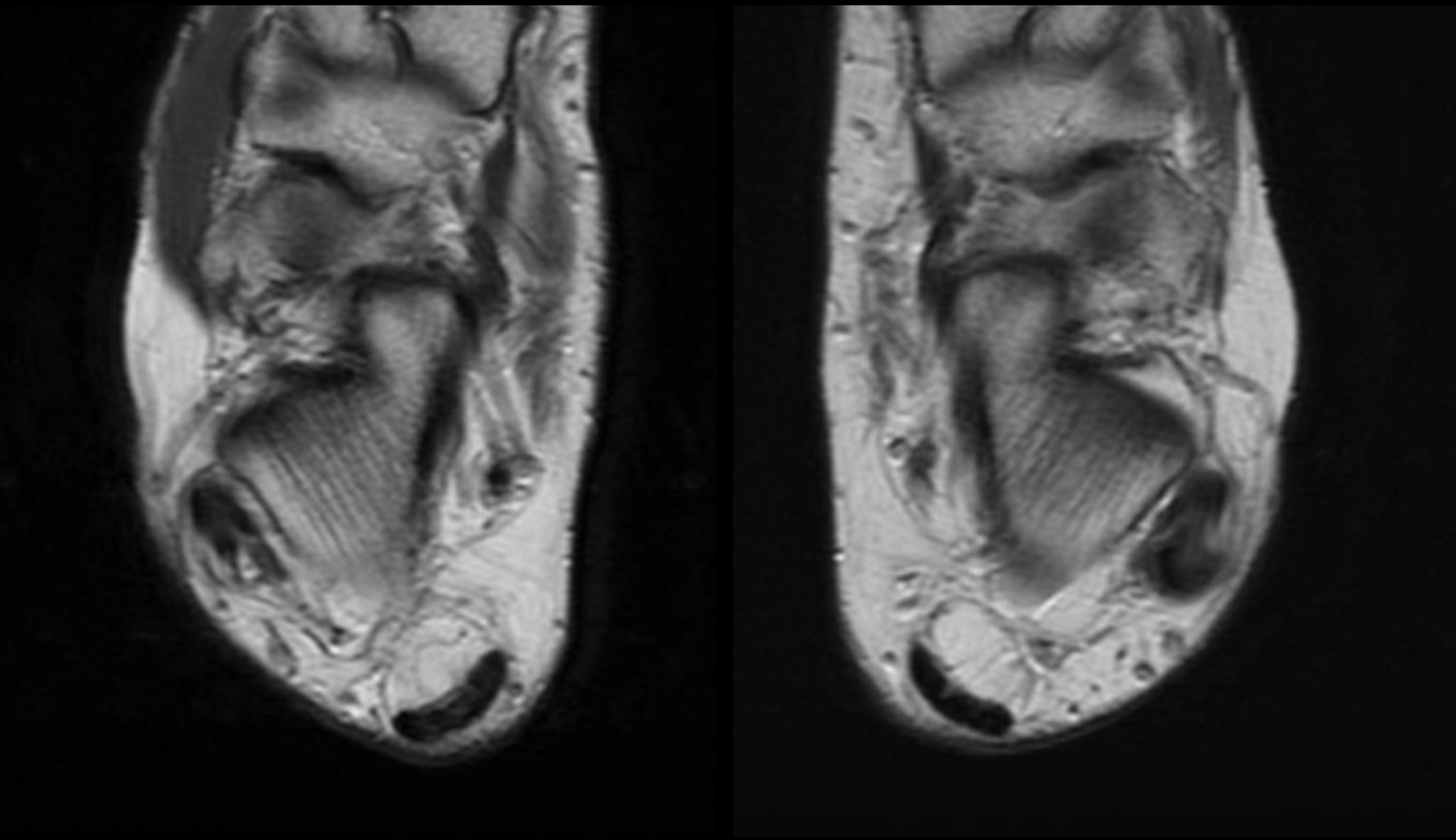


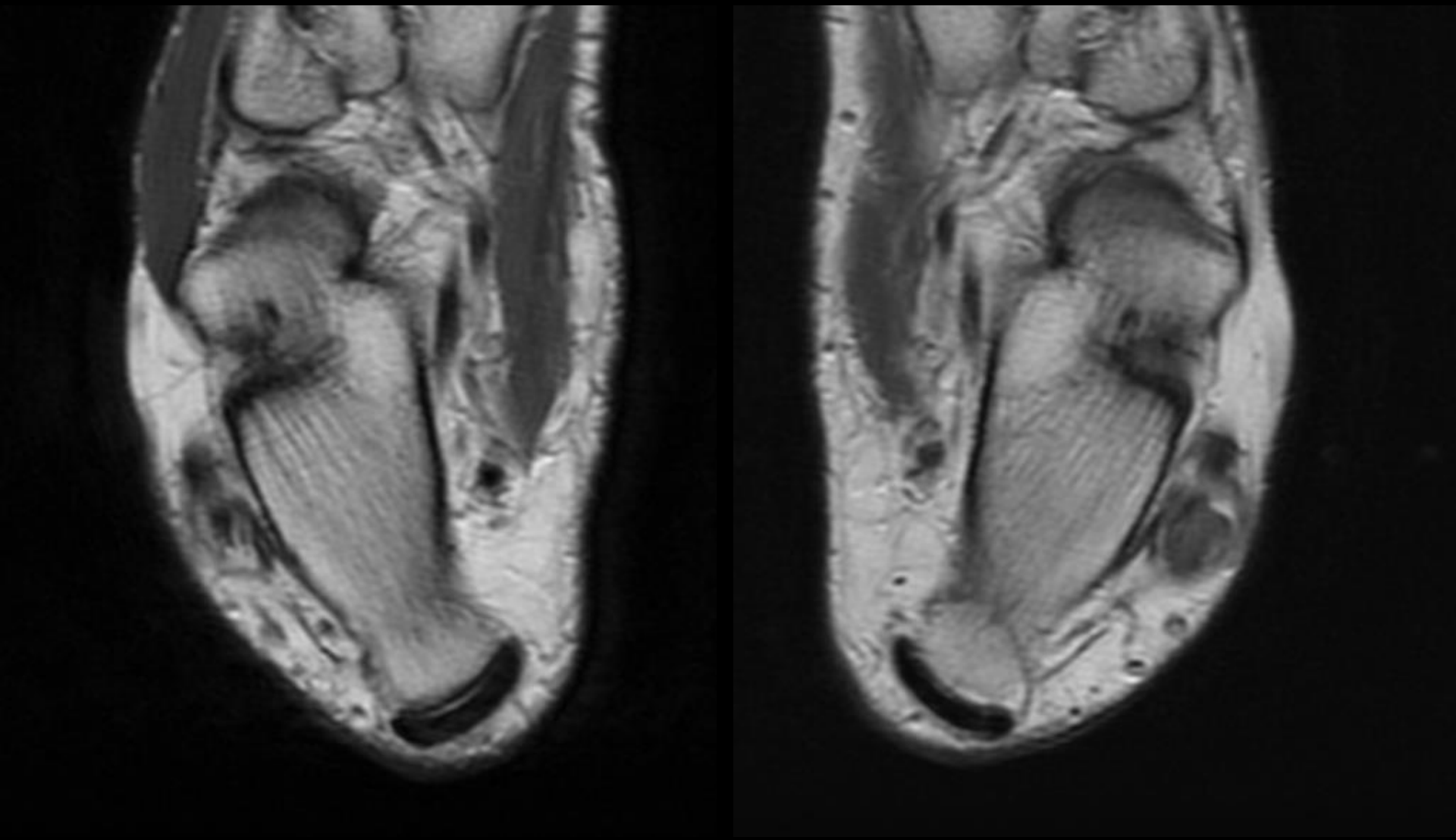


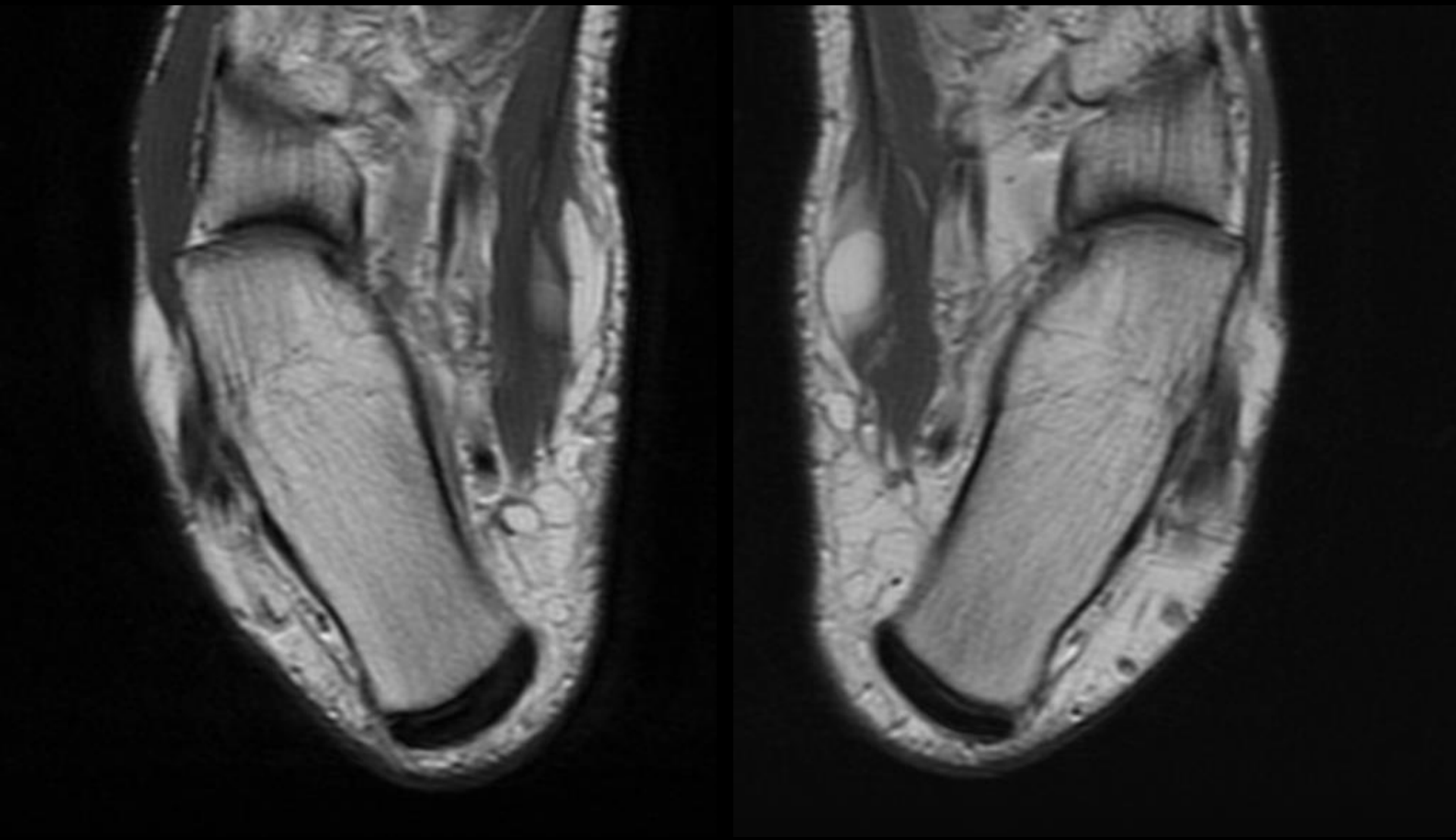


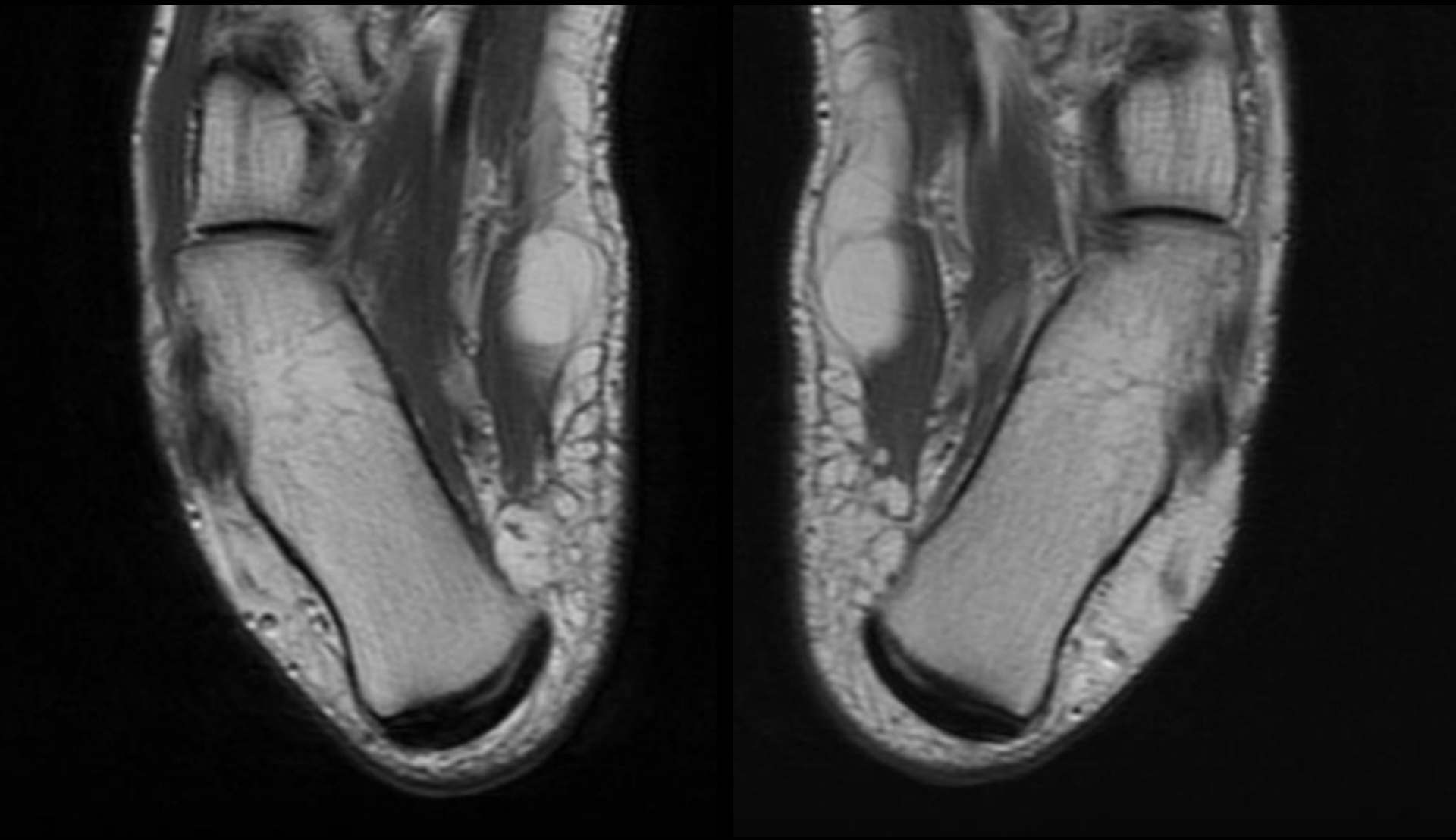


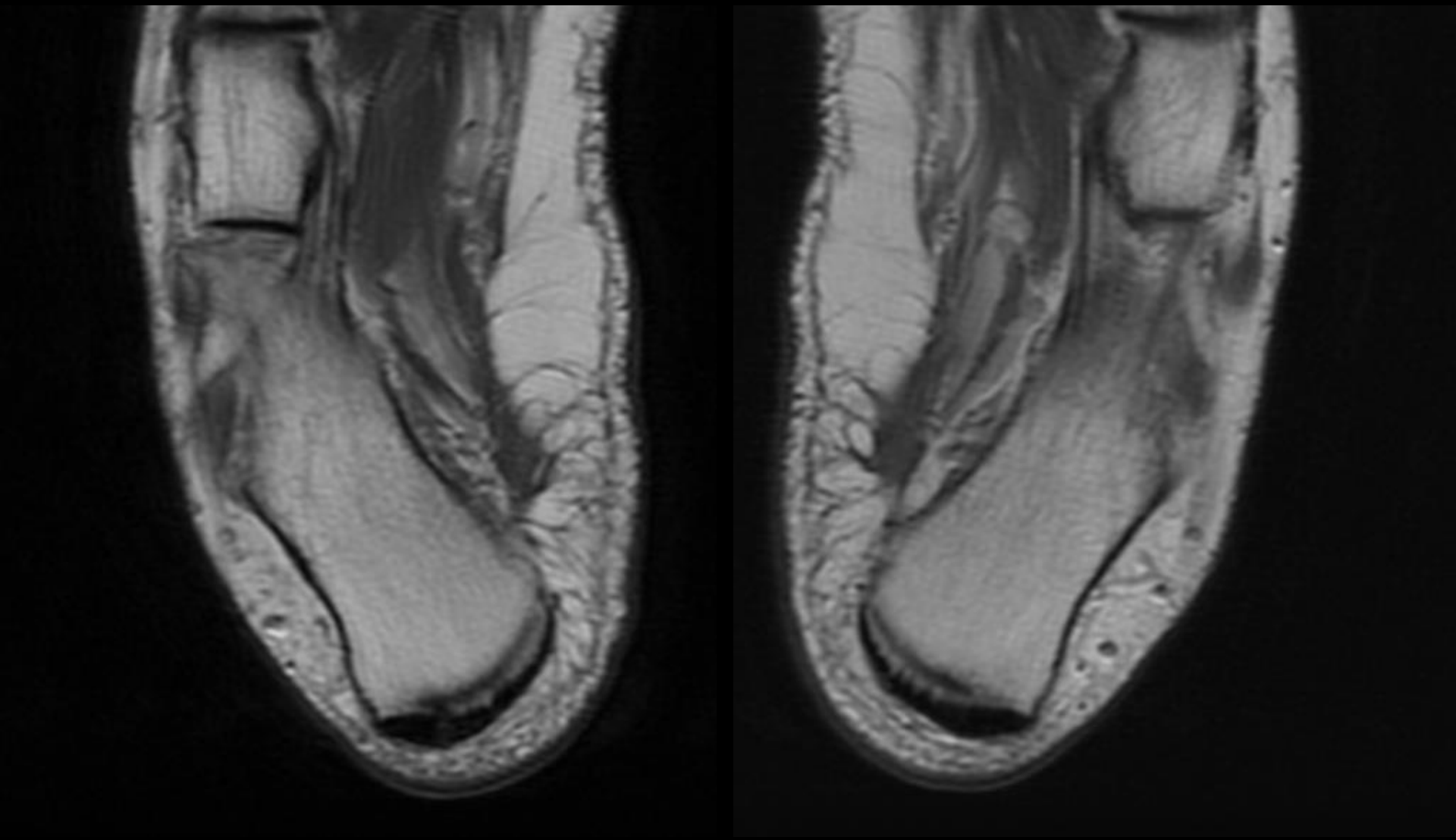


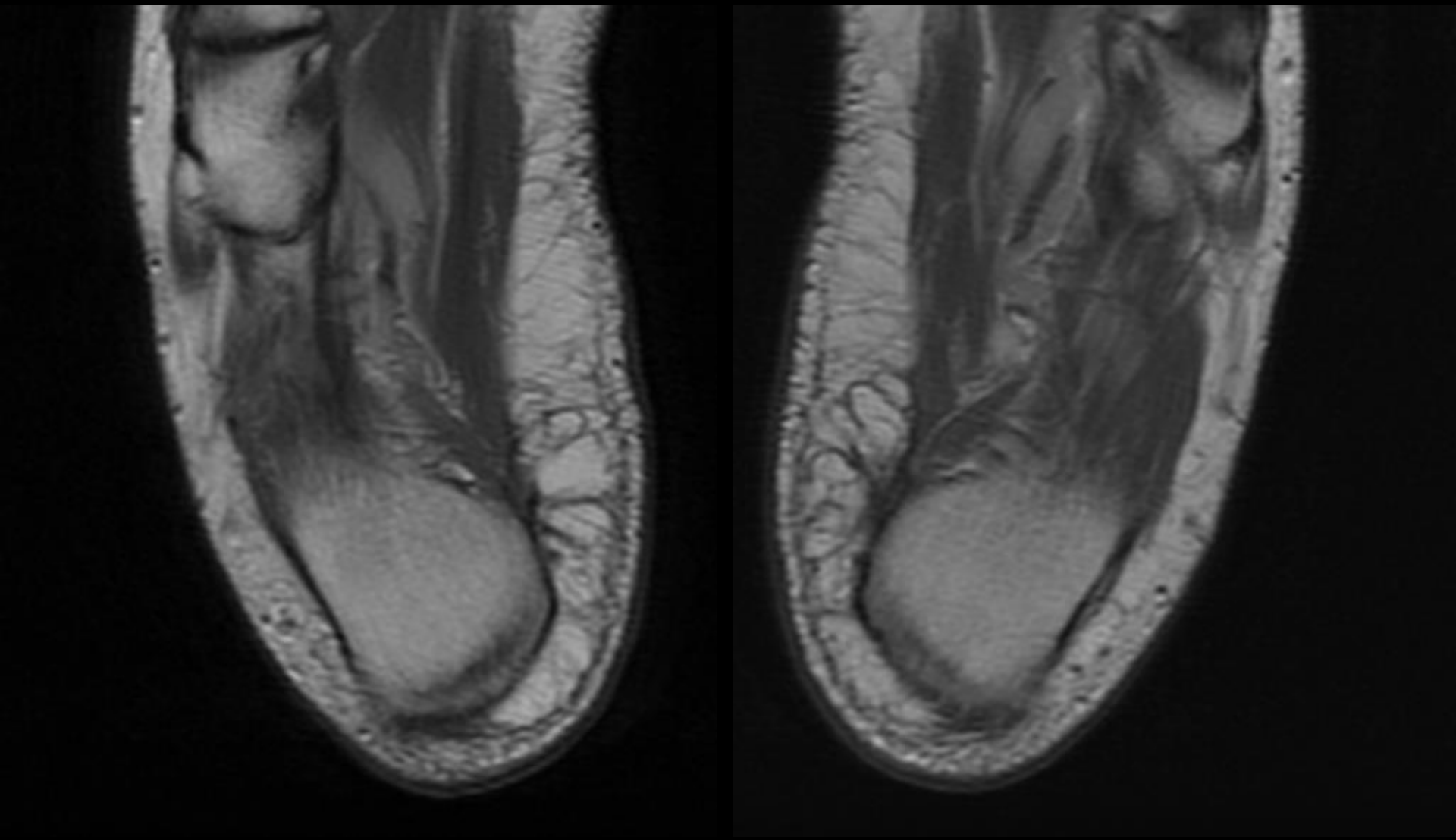


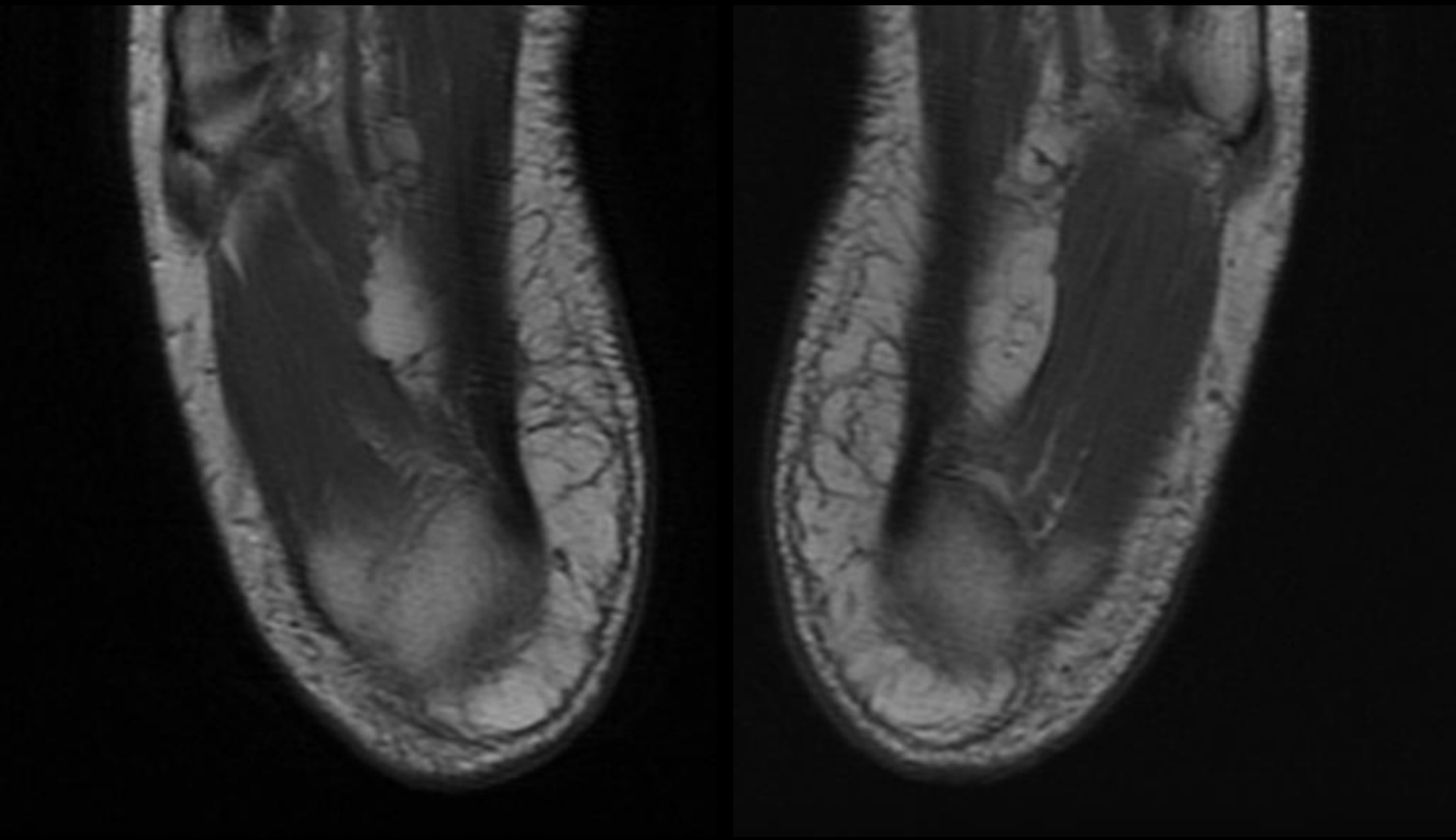


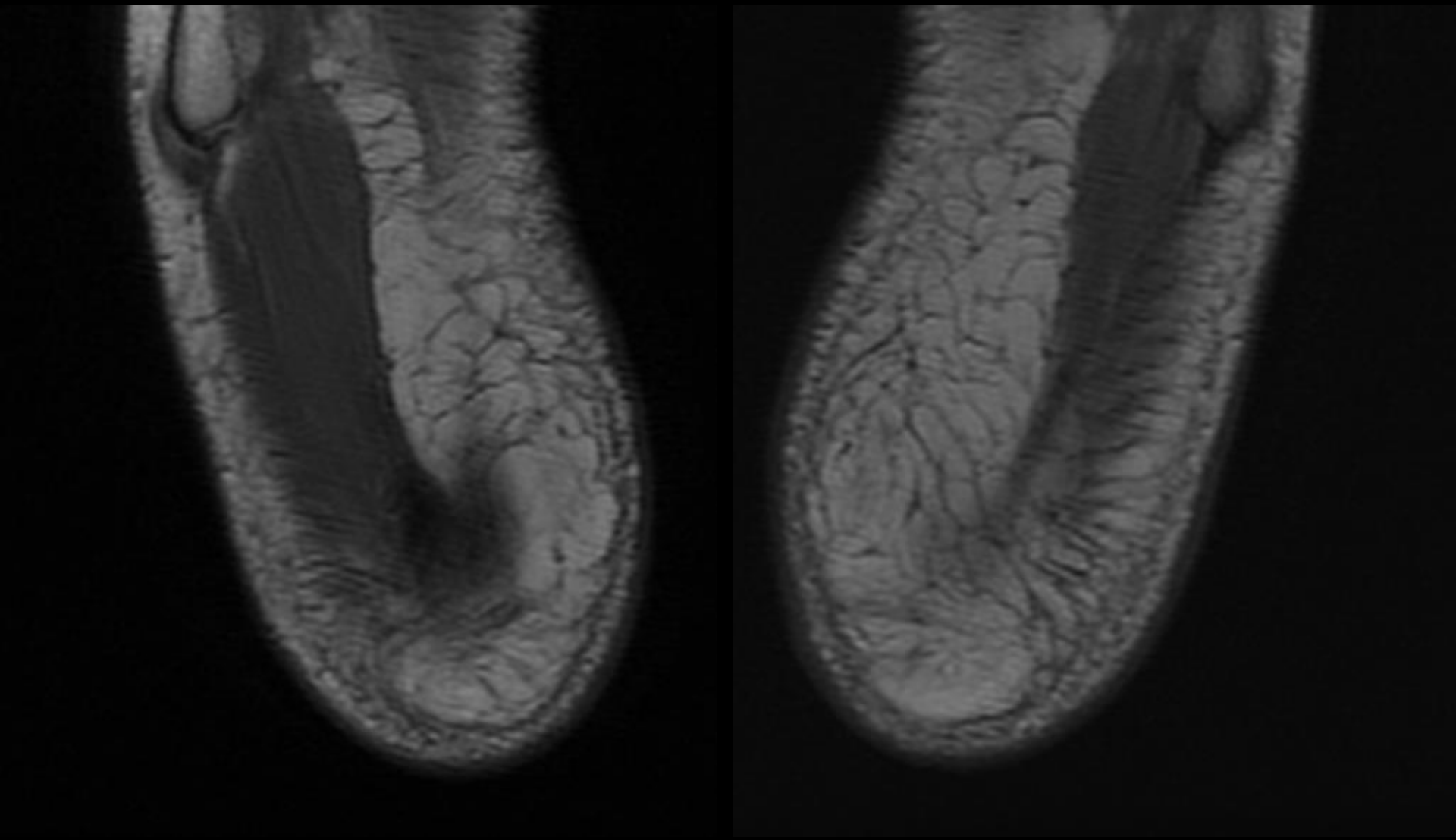


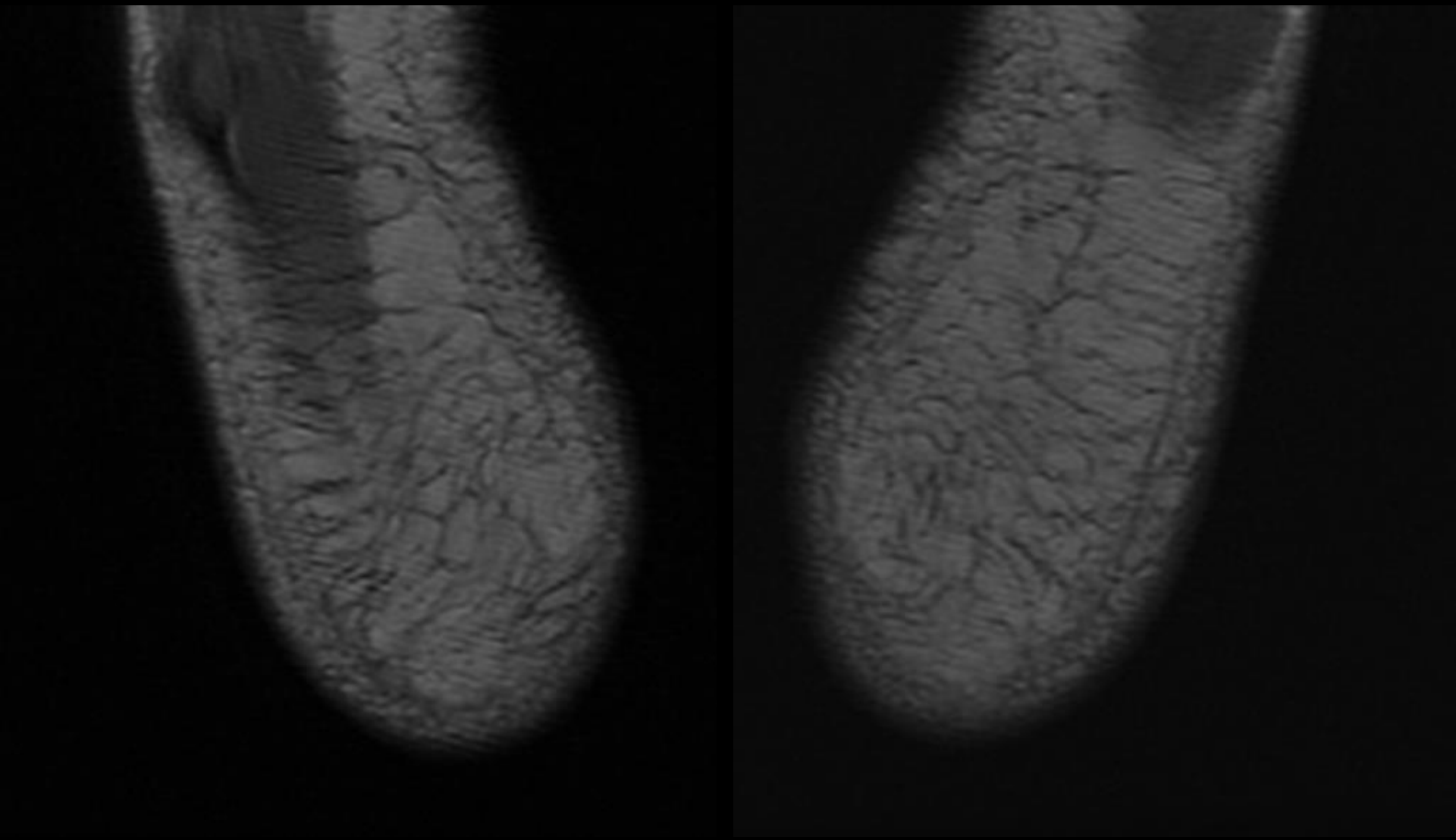


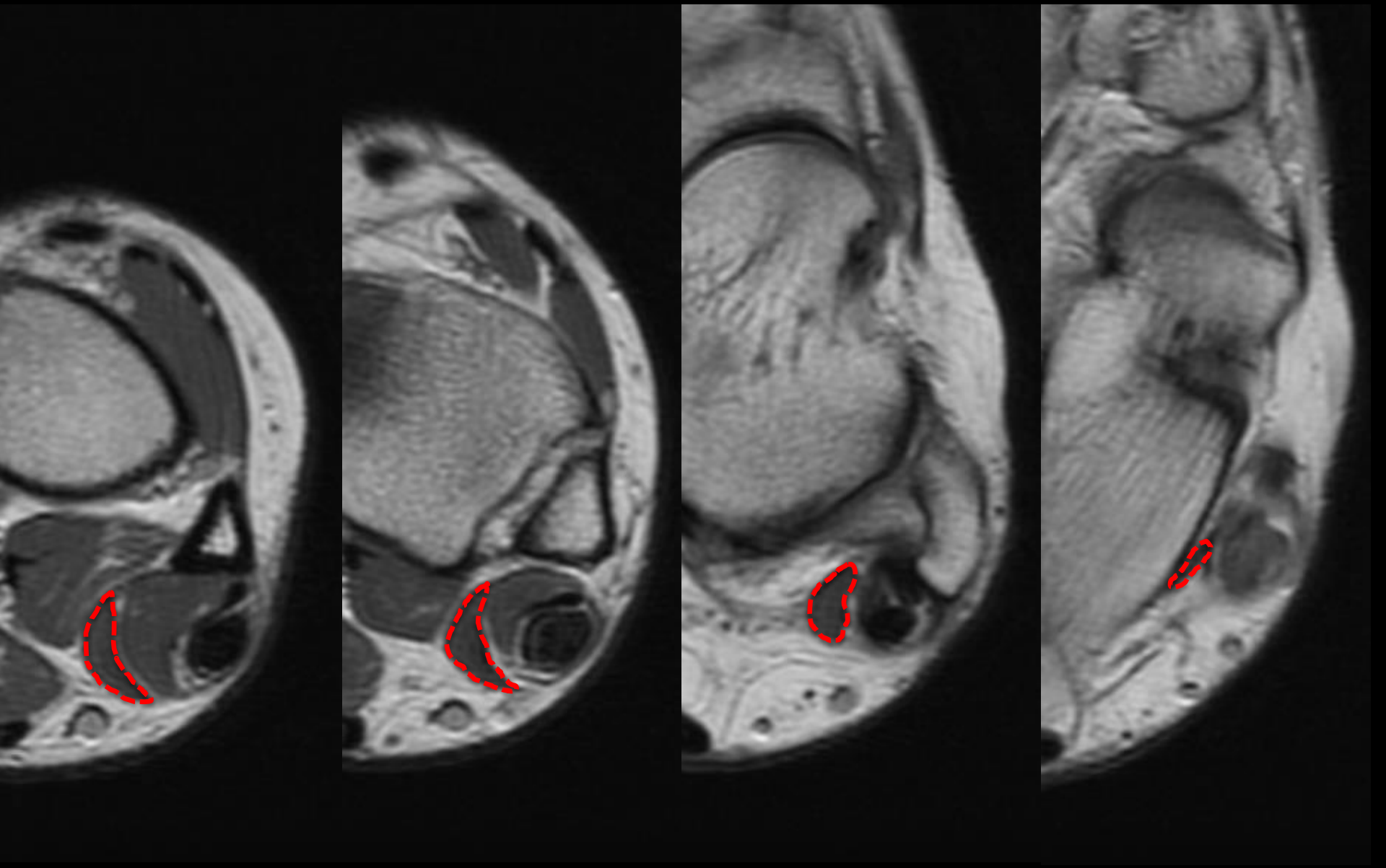








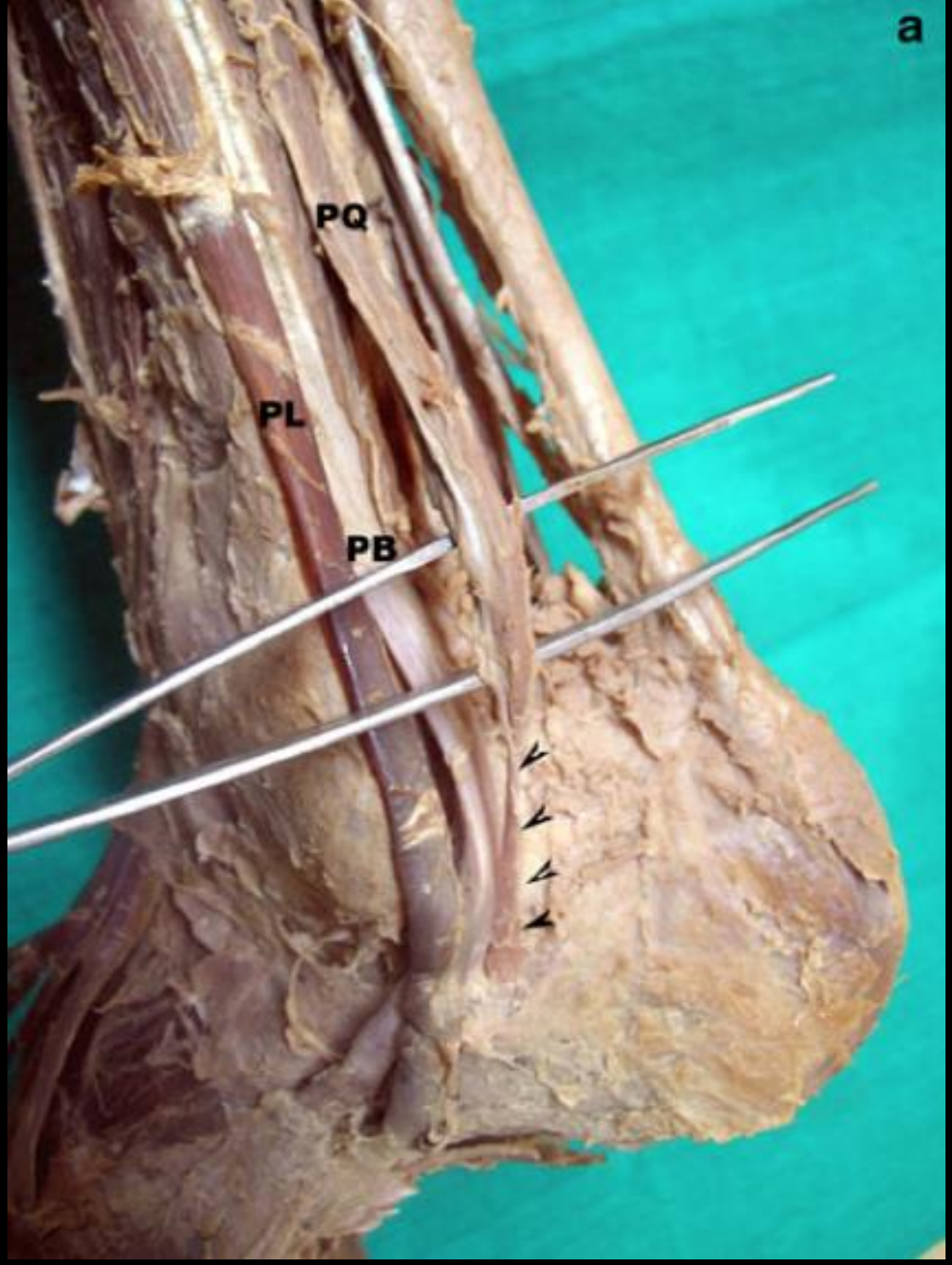




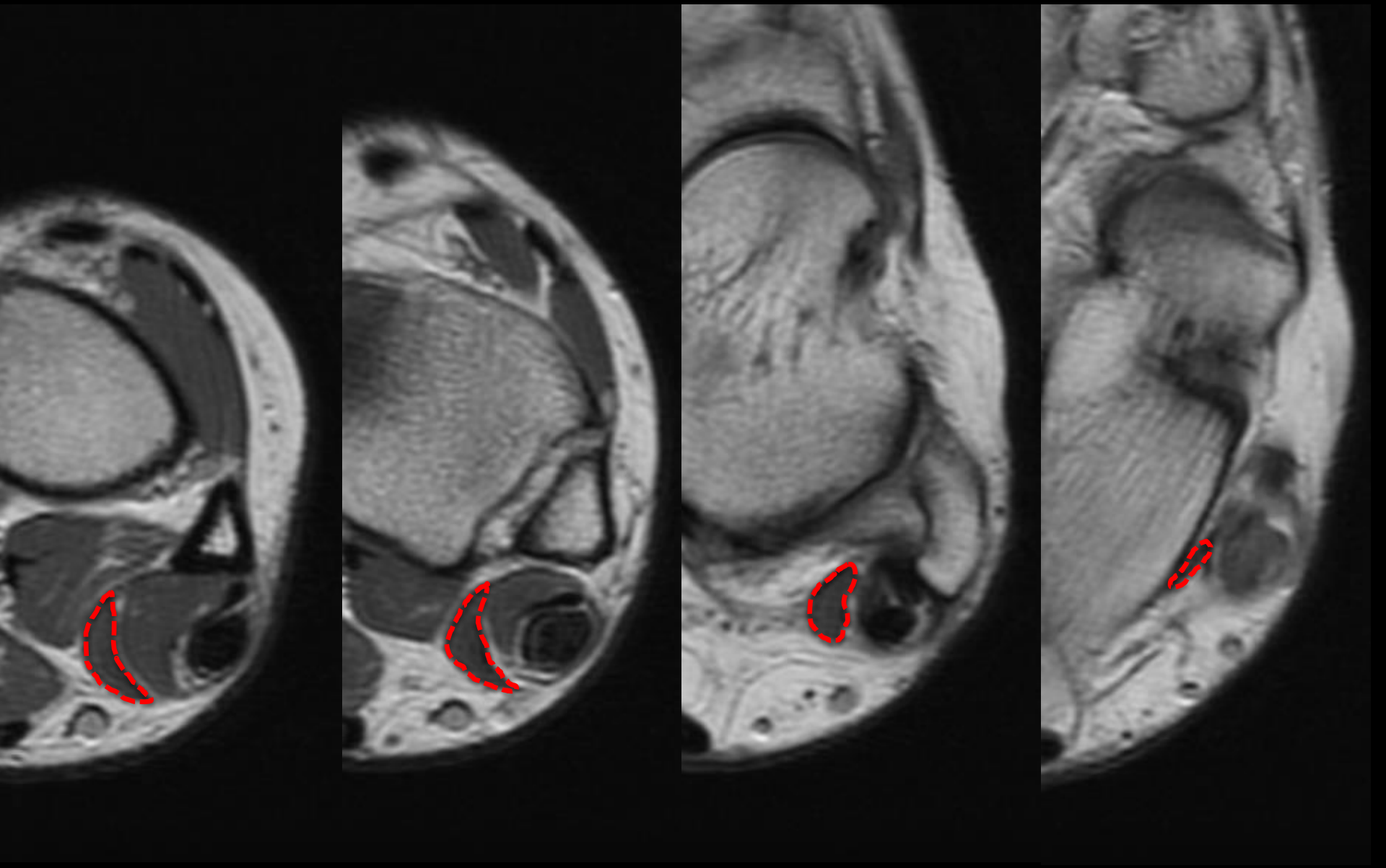
Bilateral Peroneus Quartus Muscles

Complete tears of both Peroneus longus tendons

Split tears of both Peroneus brevis tendons



Athavale SA, Gupta V, Kotgirwar S, Singh V. The peroneus quartus muscle: clinical correlation with evolutionary importance. Anat Sci Int 2012;87(2):106–110



Peroneus Quartus

Anatomy

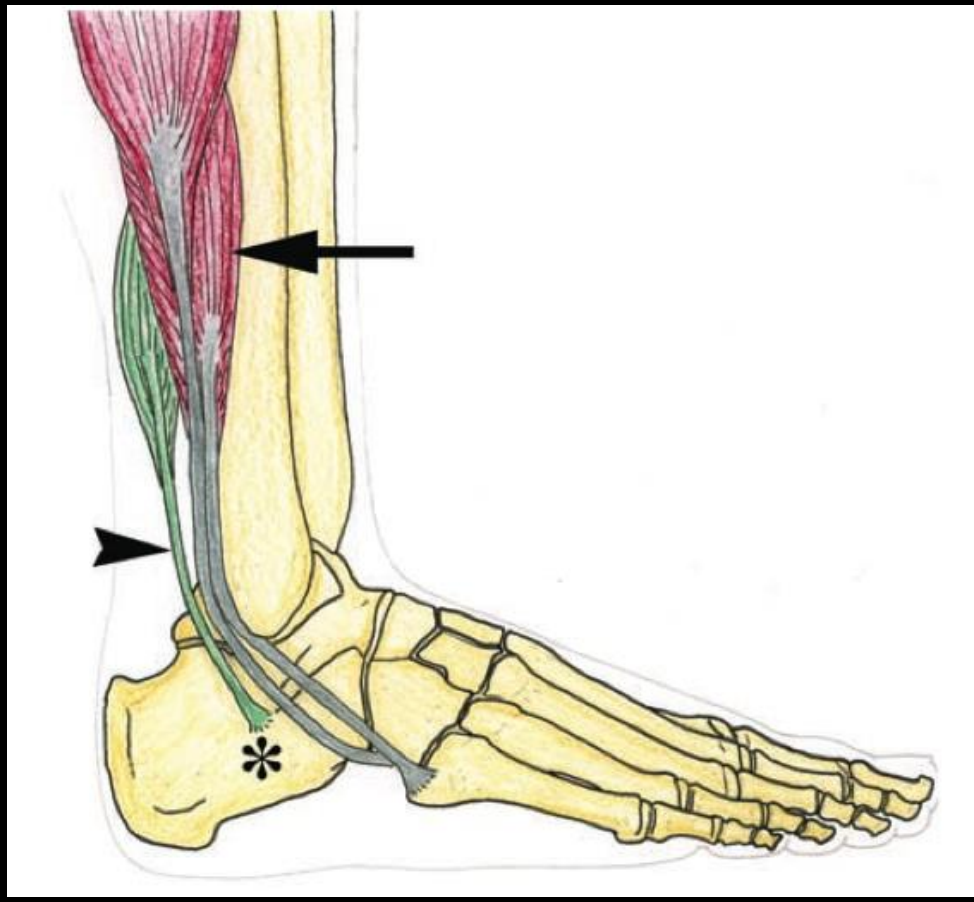
Prevalence / Function

Related Disorders

Surgical Applications

Anatomy

- Origin
  - Peroneus brevis muscle
- Posteromedial course
- Insertion sites
  - Retrotrochlear eminence
  - Peroneal tubercle (?)
  - Cuboid
  - Peroneus longus tendon
  - Phalanx / Metatarsal 5th toe

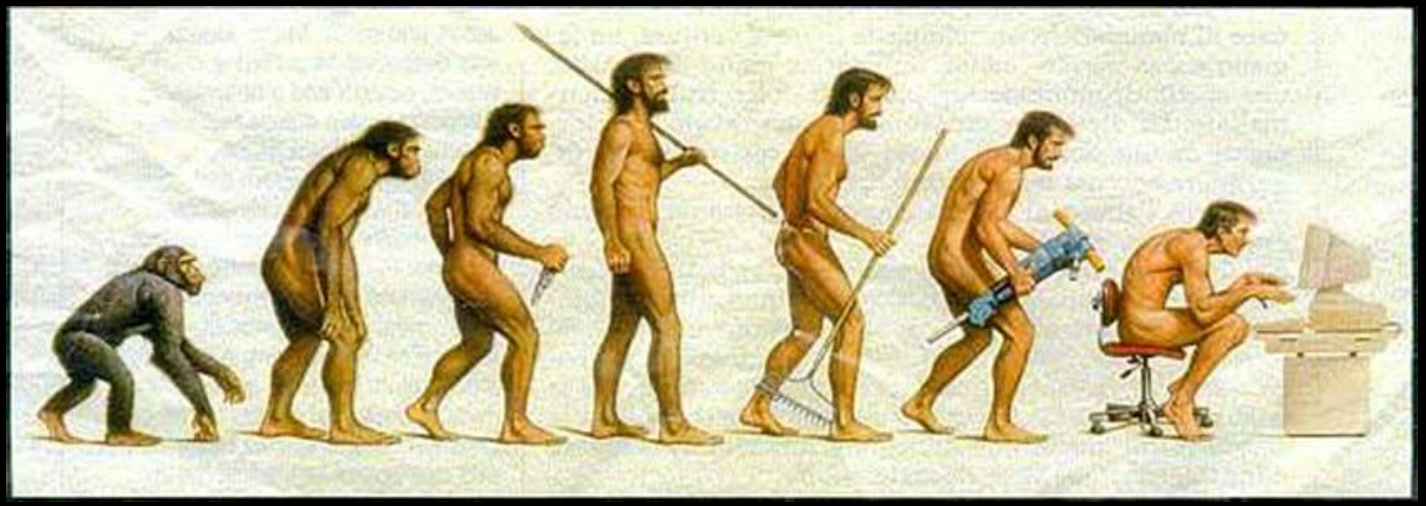


Sookur, P., Naraghi, A. & Bleakney, R., 2008. Accessory Muscles: Anatomy, Symptoms, and Radiologic Evaluation 1. *Radiographics*,

Prevalence / Function

- First described by Otto (1816)
- 6,6% to 23% of the ankles
- Frequently bilateral
- Most common in males (2,5:1)

- Unique to humans and associated with bipedal gait
- Lifts lateral edge of the foot and stabilizes hindfoot pronation



Athavale SA, Gupta V, Kotgirwar S, Singh V. The peroneus quartus muscle: clinical correlation with evolutionary importance. Anat Sci Int 2012;87(2):106–110

Related Disorders

- Frequently asymptomatic
- Symptoms can arise spontaneously or following acute trauma
- May lead to crowding at the retromalleolar groove and stenosis of the lateral compartment
- Peroneal brevis tendon dislocation and tear 18% (Sobel 1990)
- Hypertrophy of the bone attachments may cause tenosynovitis
- Lateral ankle pain and instability

Sookur, P., Naraghi, A. & Bleakney, R., 2008. Accessory Muscles: Anatomy, Symptoms, and Radiologic Evaluation 1. *Radiographics*,