Case Presentation

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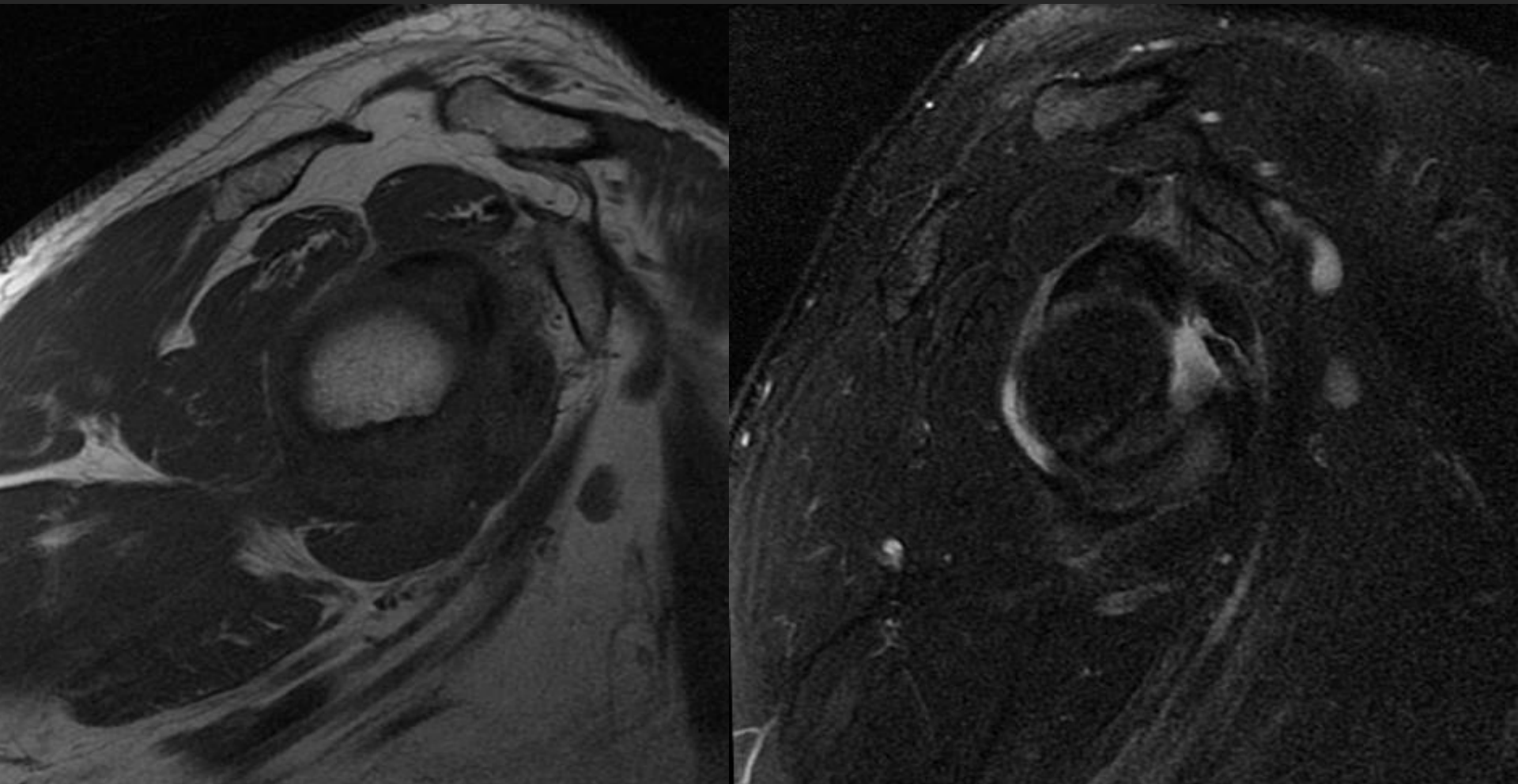
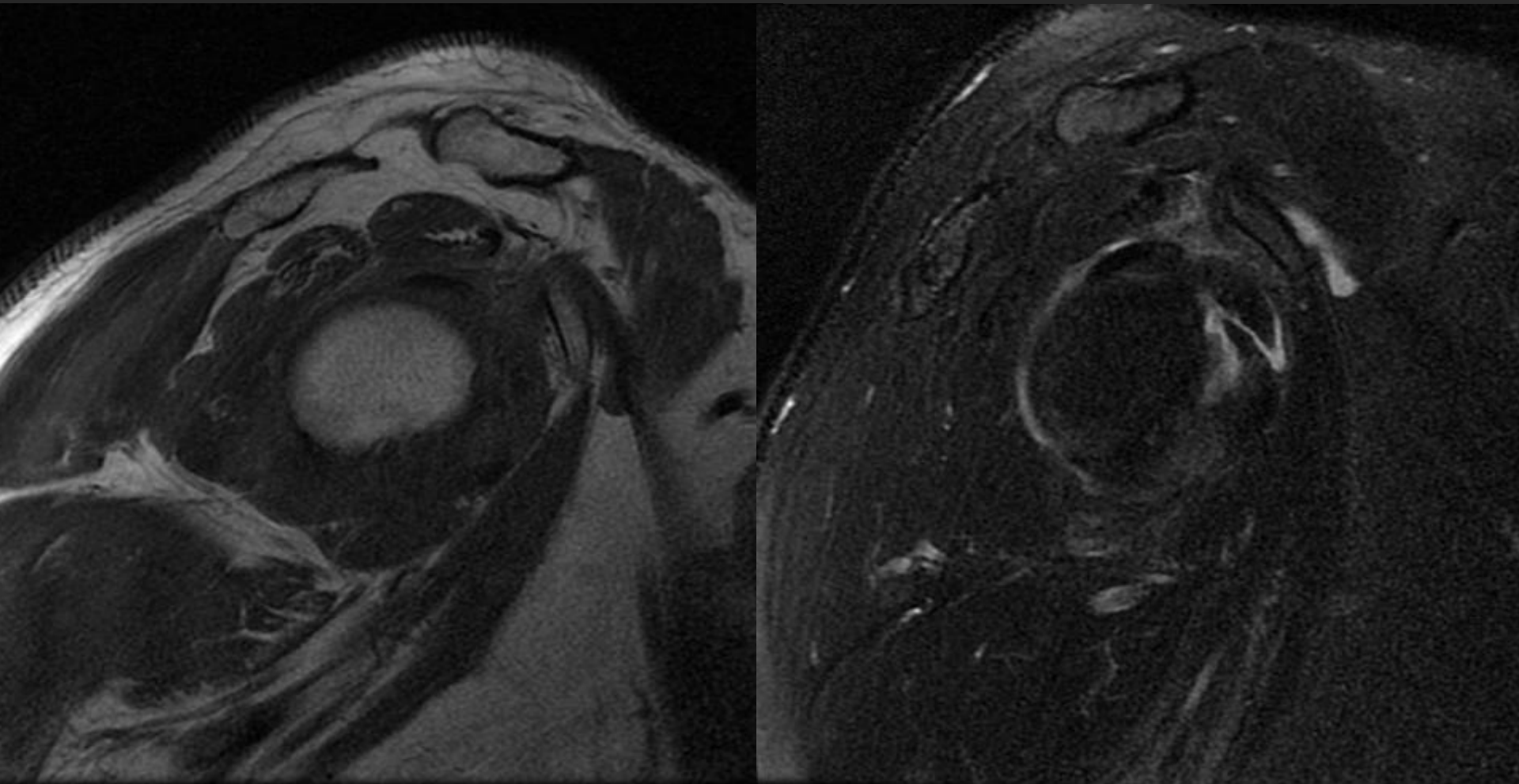
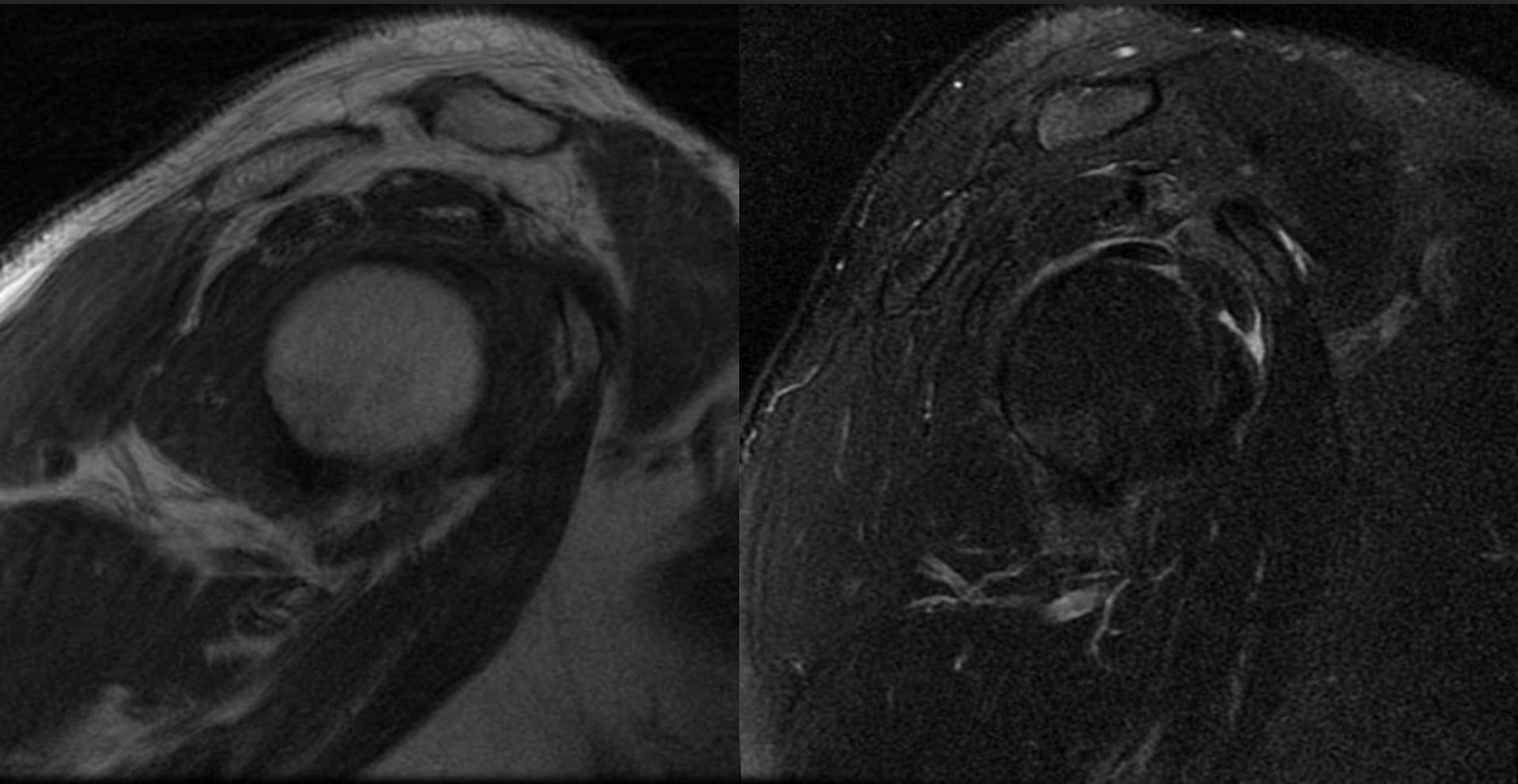
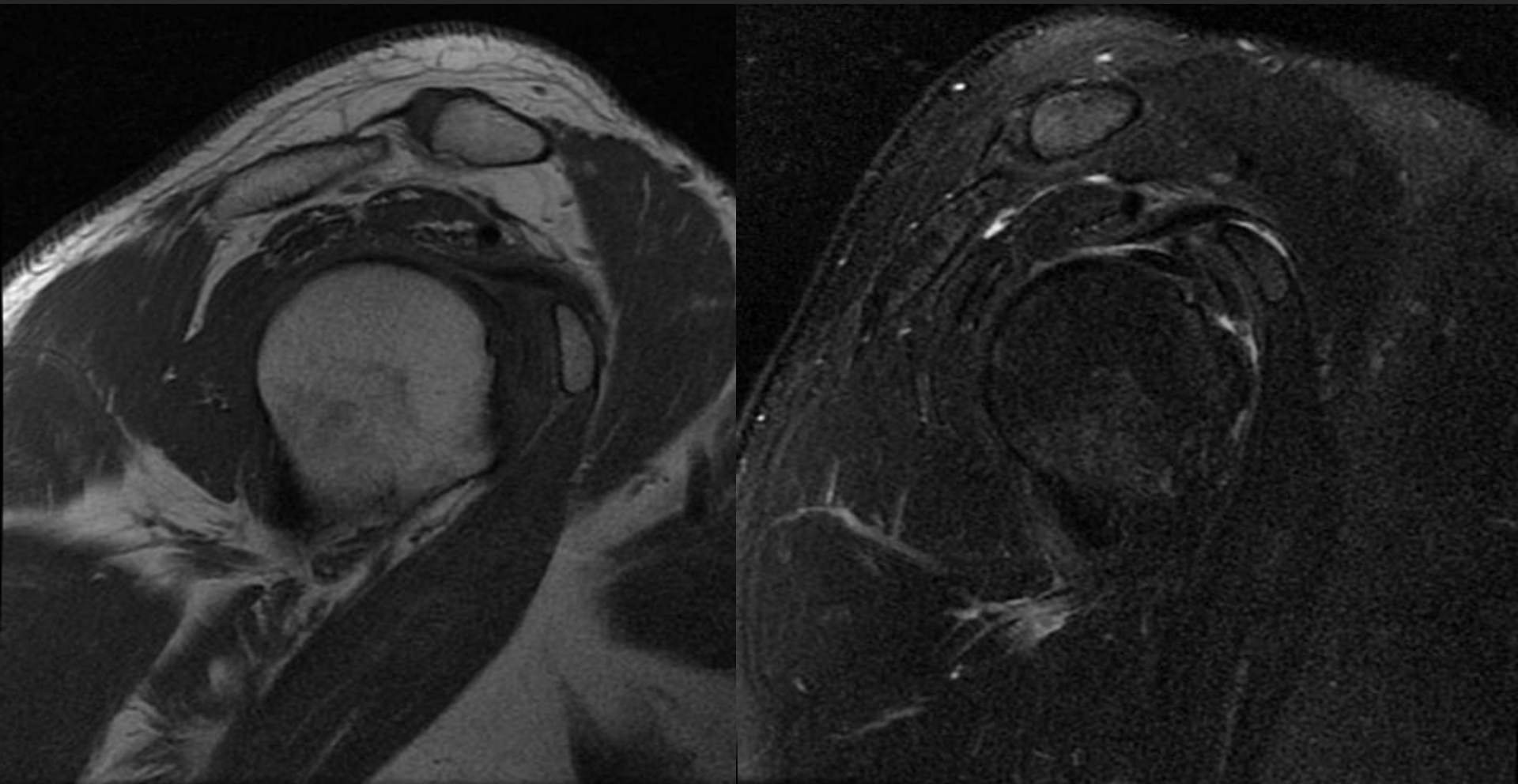
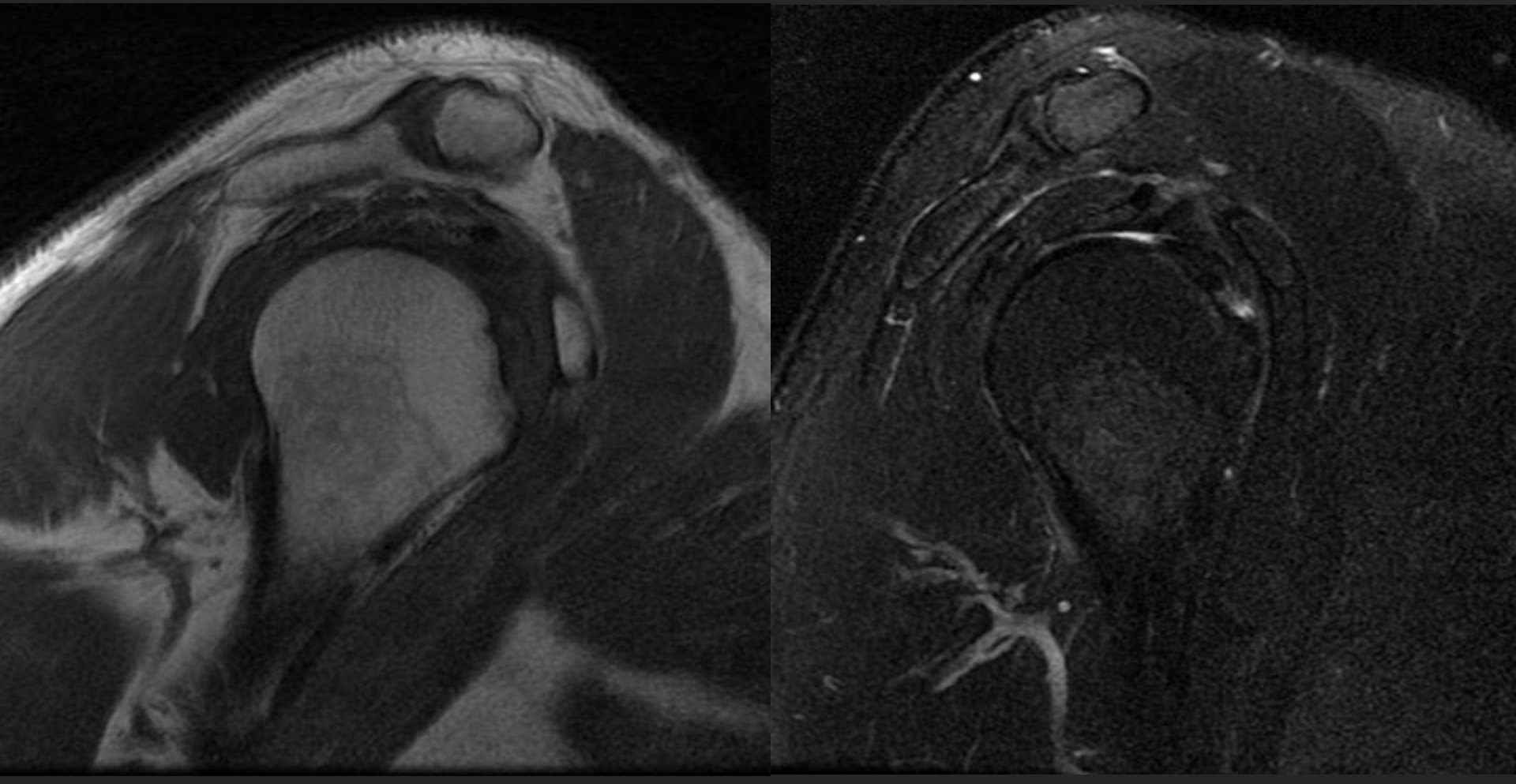
Shoulder pain





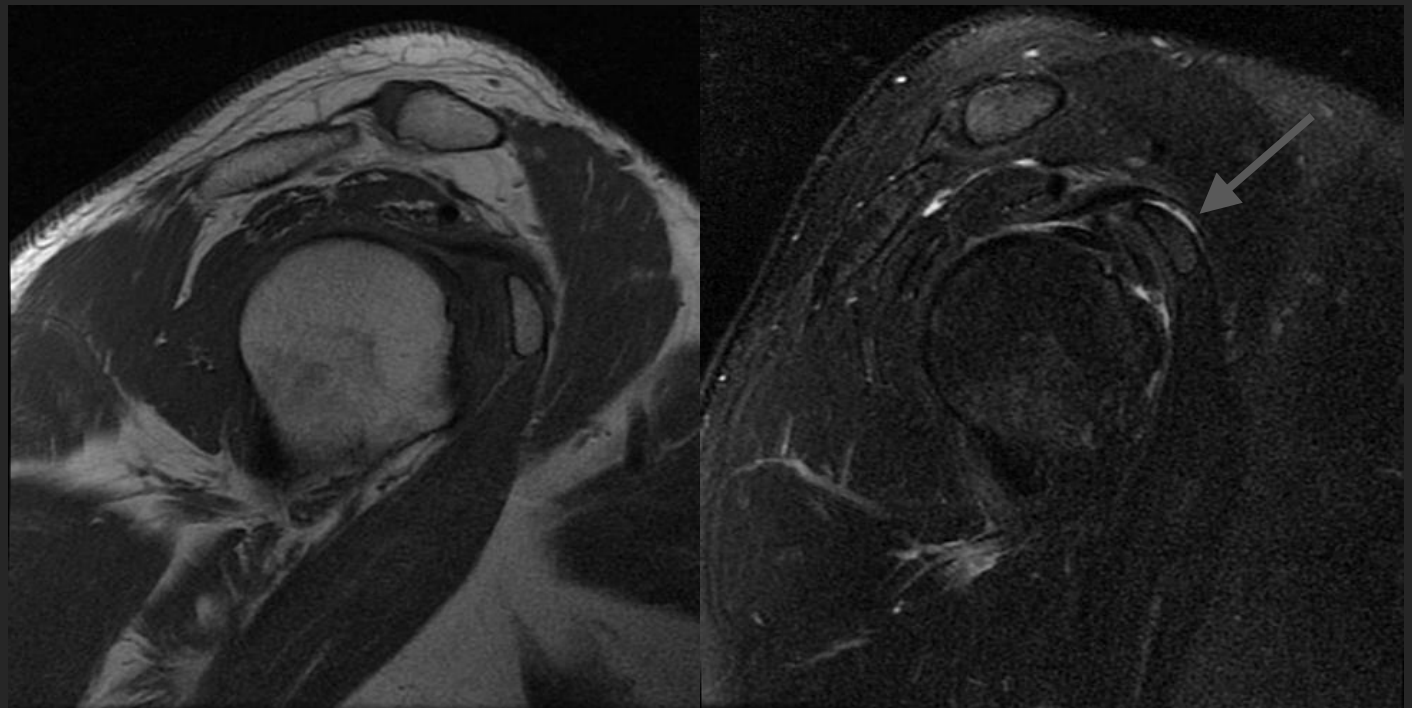




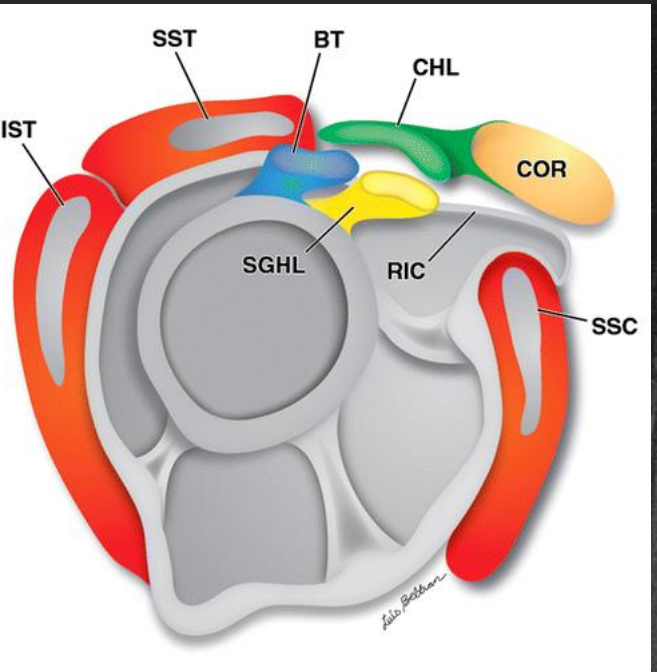


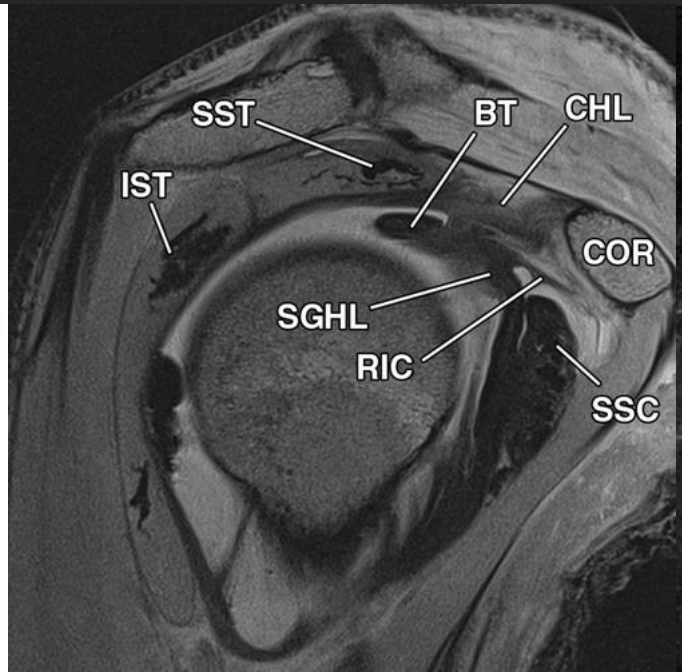
Diagnosis

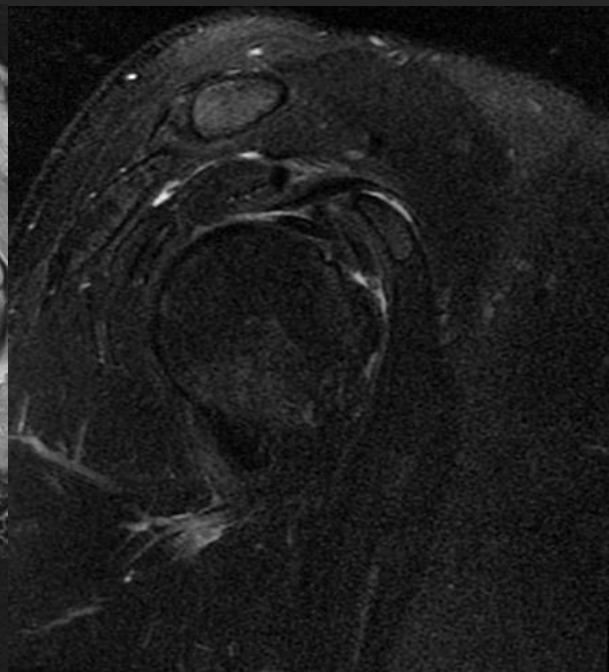
Anomalous insertion of the pectoralis minor tendon (fluid separates the tendon from the coracoid, which it normally inserts into)



Rotator Interval

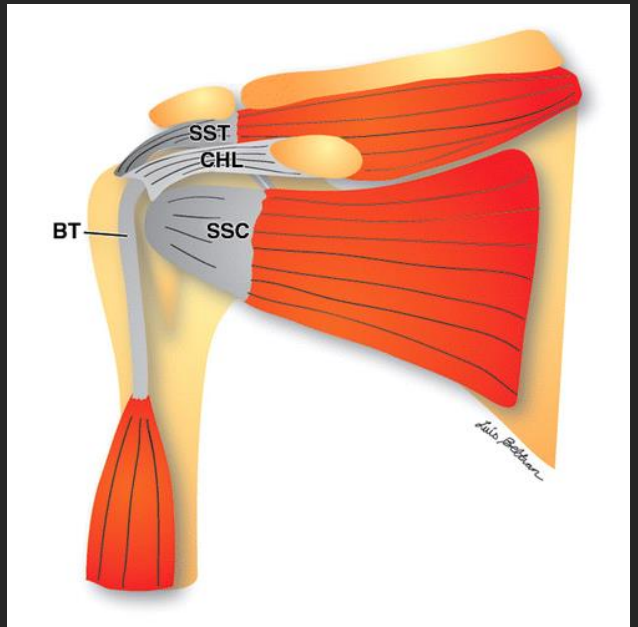


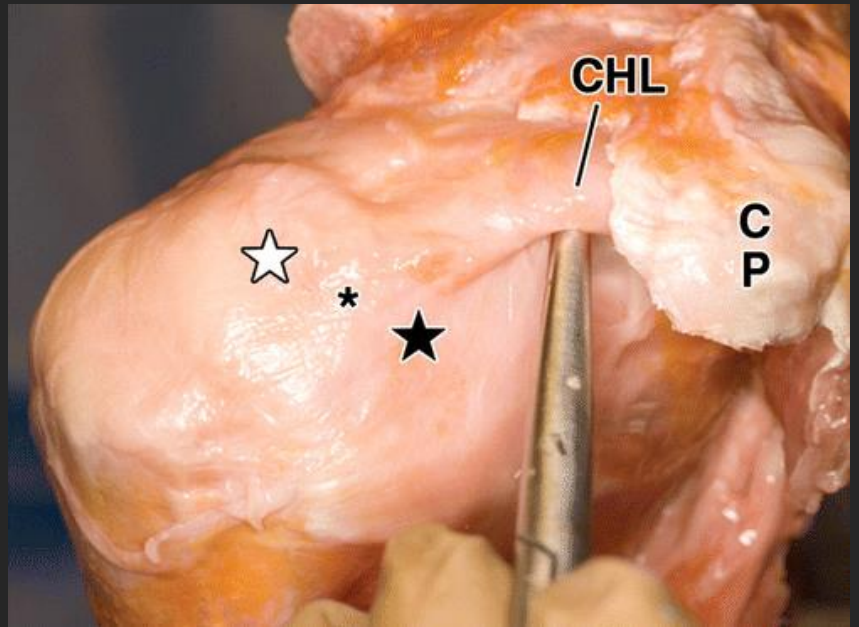




Coracohumeral Ligament

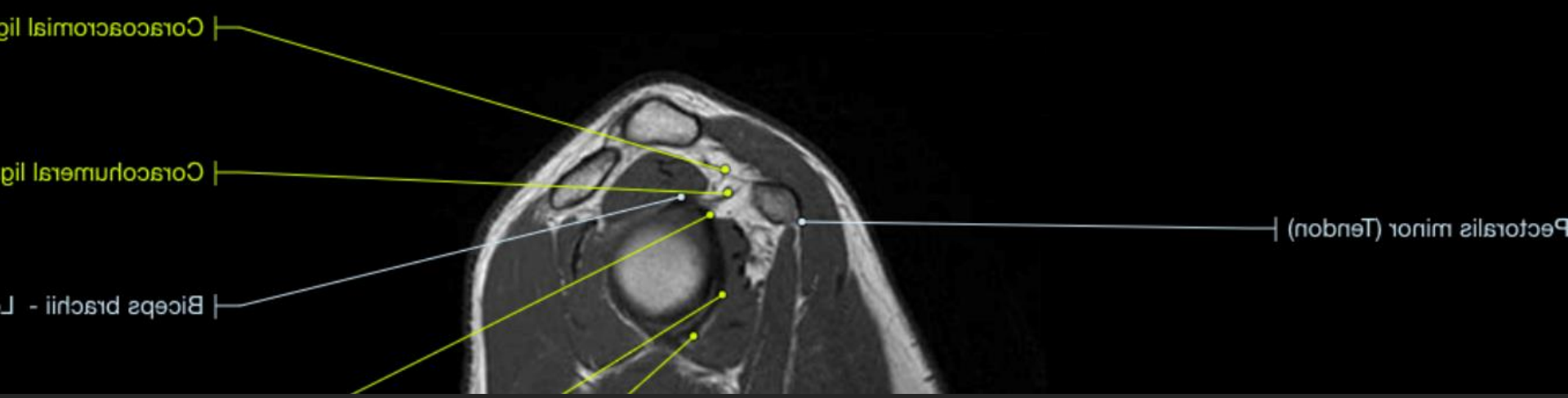
The coracohumeral ligament is trapezoidal and arises from the proximal third of the posterolateral coracoid process. It inserts onto the humerus greater and lesser tuberosities.





Pectoralis Minor Normal Anatomy

Normally arises from the upper margins and outer surfaces of the third, fourth, and fifth ribs, and inserts into the upper medial aspect of the coracoid process.



Cadaveric studies have reported cases of direct continuation of the pectoralis minor tendon into the glenohumeral joint capsule with no discernible coracohumeral ligament.

Pectoralis Minor Anomalous Insertion

Le Double classification from 1897

Type I: Pectoralis minor tendon runs over the superior margin of the coracoid process to insert distally on multiple possible sites (supraspinatus tendon, coracoacromial ligament, the greater or lesser tuberosity of the humerus, glenoid). (*Fluid can interpose between the tendon and the coracoid process*)

Type II: Most pectoralis minor tendon inserts into the coracoid process with some fibers extending distally to insert into multiple possible sites. (*This type may be missed on MRI*).

Type III: The entire tendon inserts into the glenohumeral joint capsule or the humeral tuberosities. (*Fluid can interpose between the tendon and the coracoid process*)

Pectoralis Minor Anomalous Insertion

Incidence between 10%-16%

May cause difficulty during rotator cuff repair.

- Reports of tension on repaired tendon and difficulty in mobilizing torn retracted fibers.

Associated with stiffness similar to adhesive capsulitis, as well as subacromial and subcoracoid impingement.

May predispose to SLAP tears.

References

1. Petchprapa et al. The Rotator Interval: A Review of Anatomy, Function, and Normal and Abnormal MRI Appearance
2.
3. Tubbs RS et al. Unusual attachment of the pectoralis minor muscle.
4. Lee CB et al. Ectopic Insertion of the Pectoralis Minor Tendon: Inter-Reader Agreement and Findings in the Rotator Interval on MRI
5. Ovesen J, Nielsen S. Experimental distal subluxation in the glenohumeral joint. Arch Orthop Trauma Surg. 1985; 104(2): 78-81