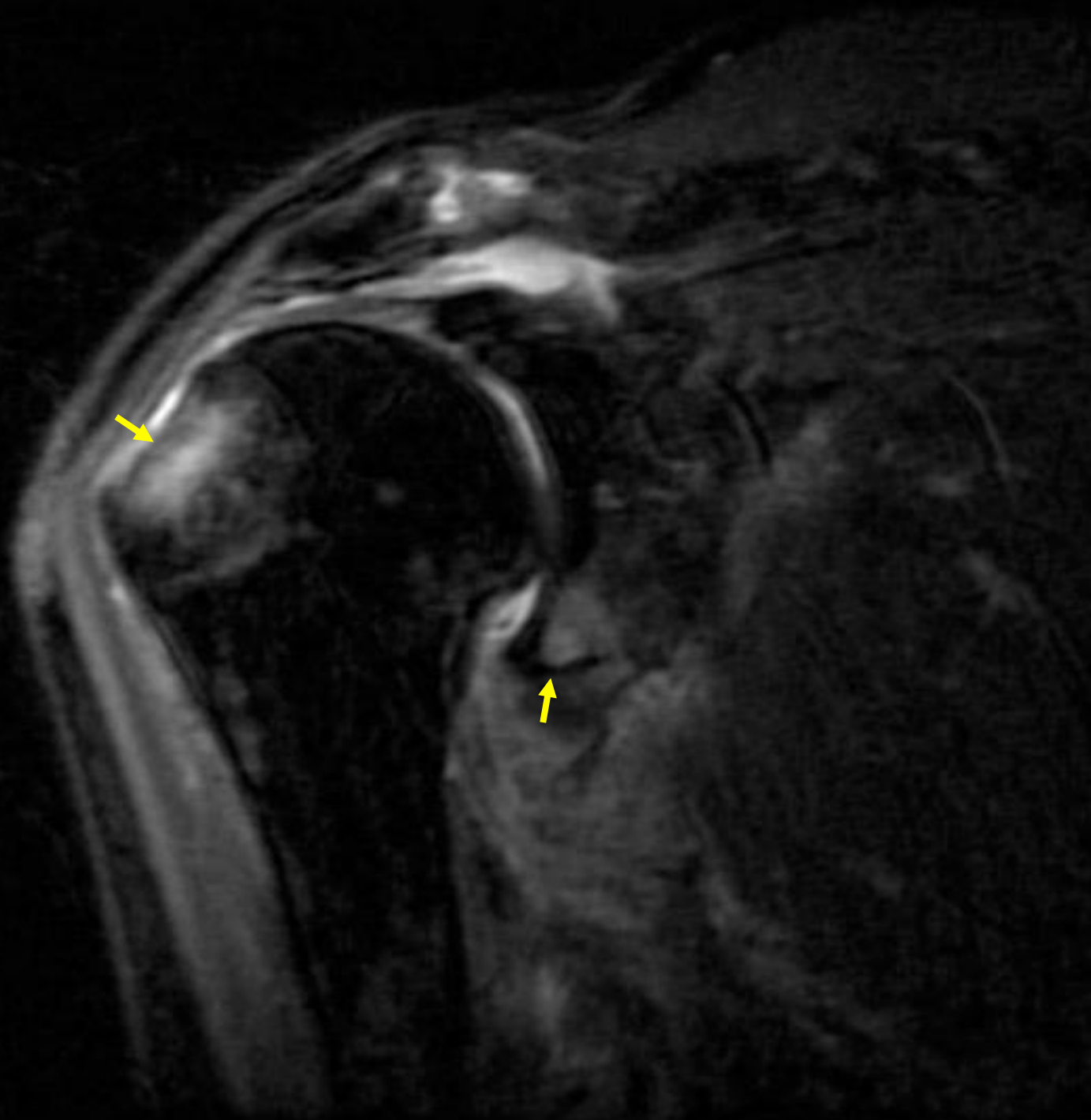
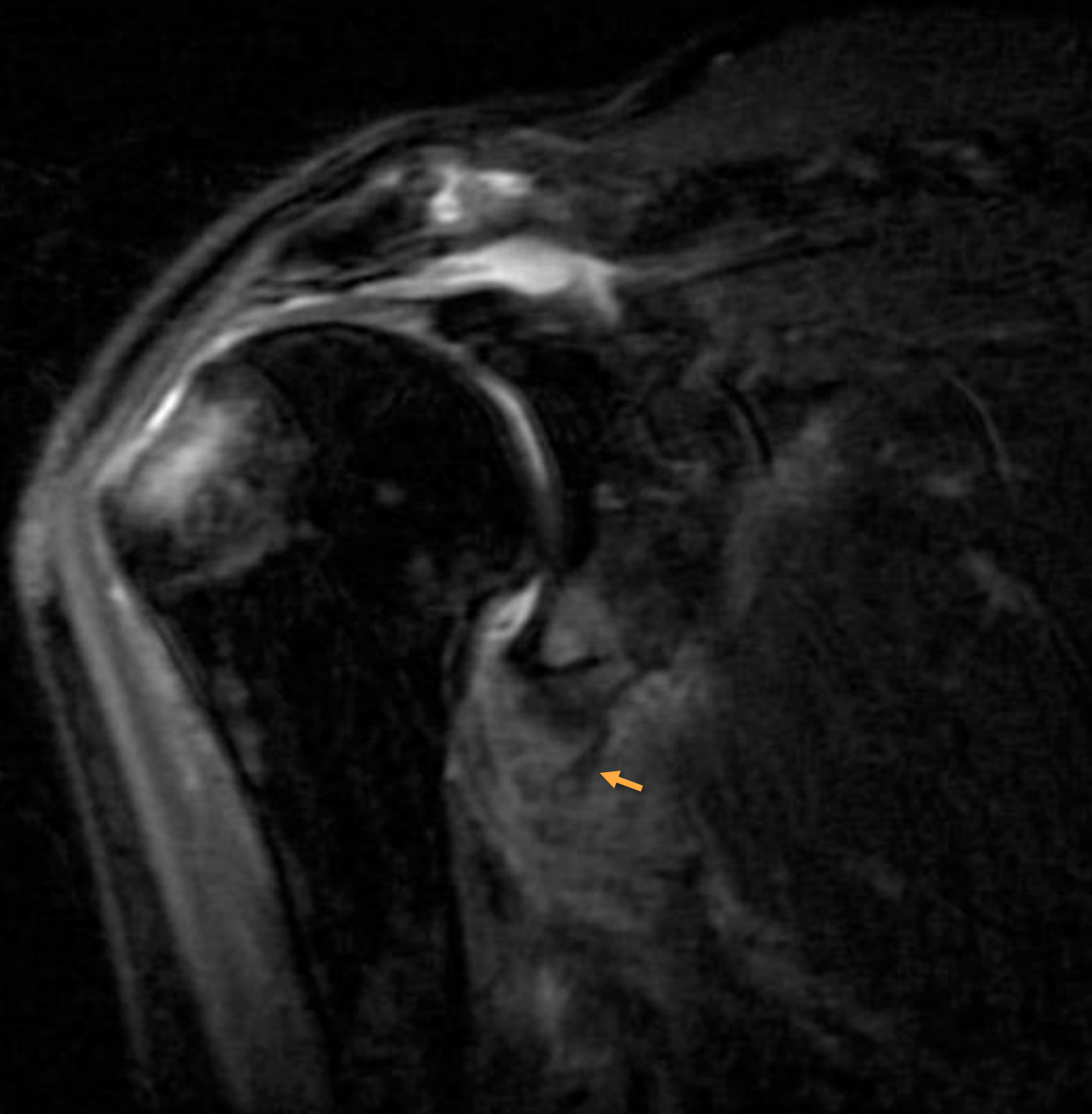




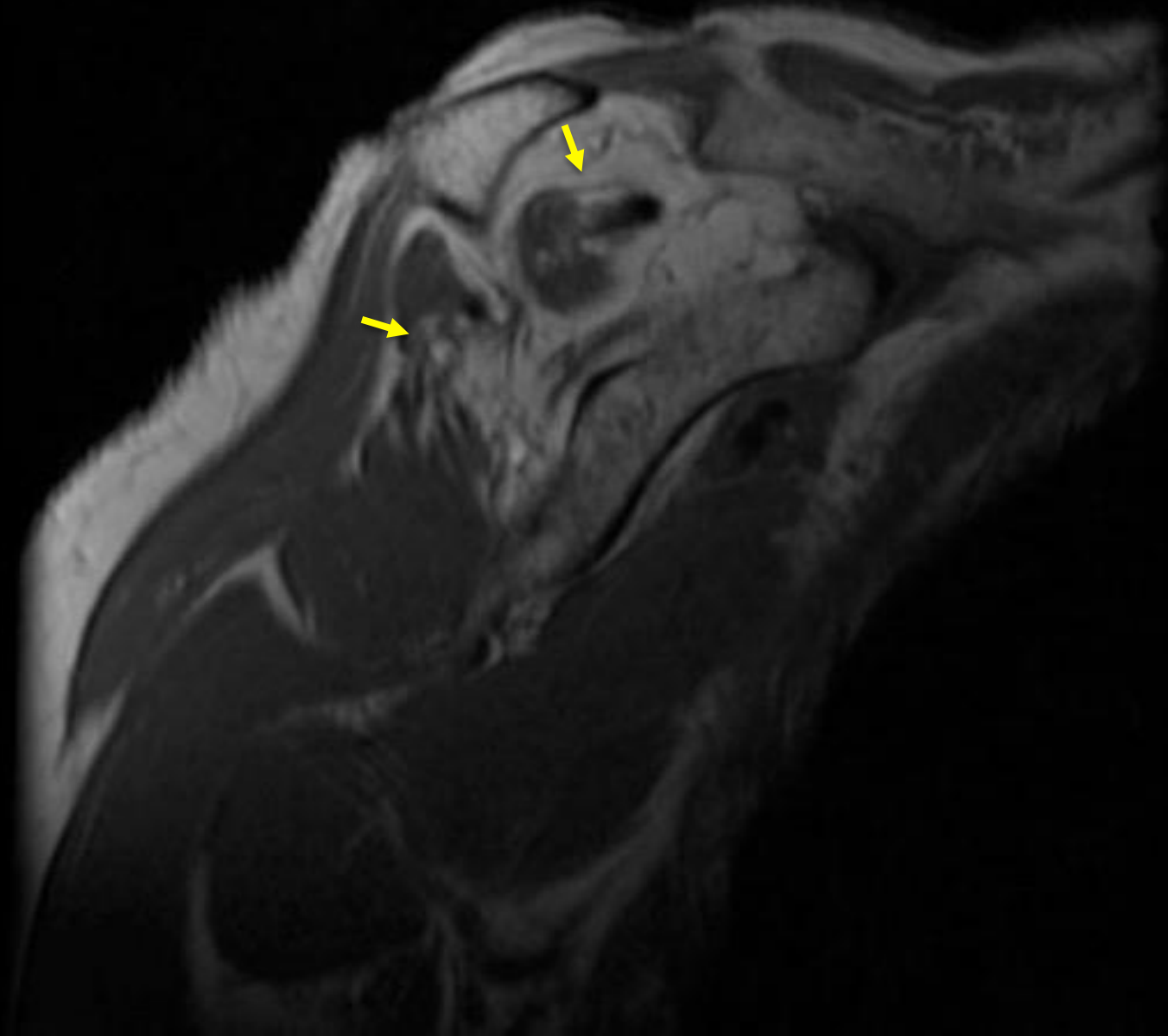
88 year old female with persistent right shoulder pain following dislocation.

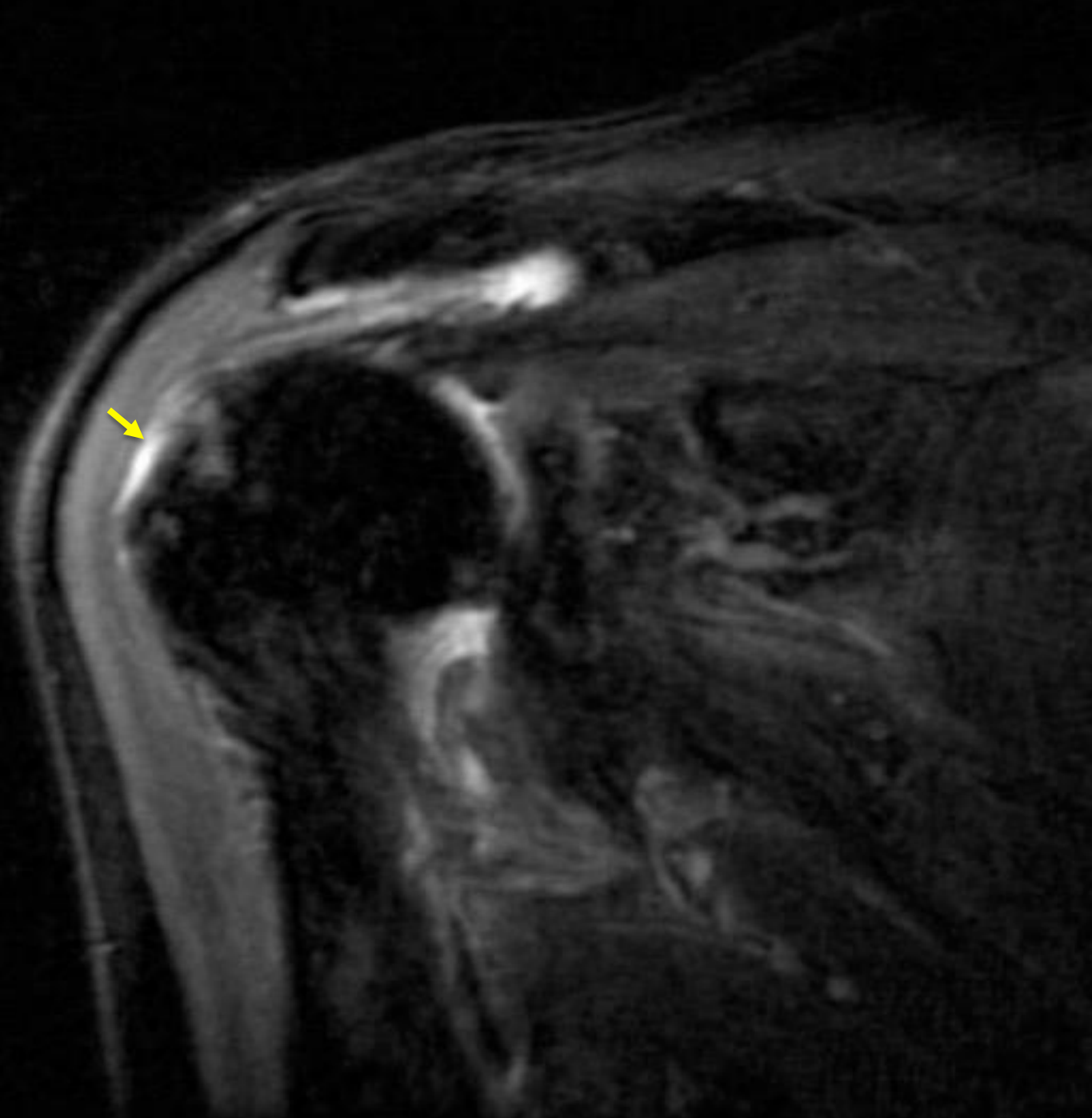
Alessandro Vidoni

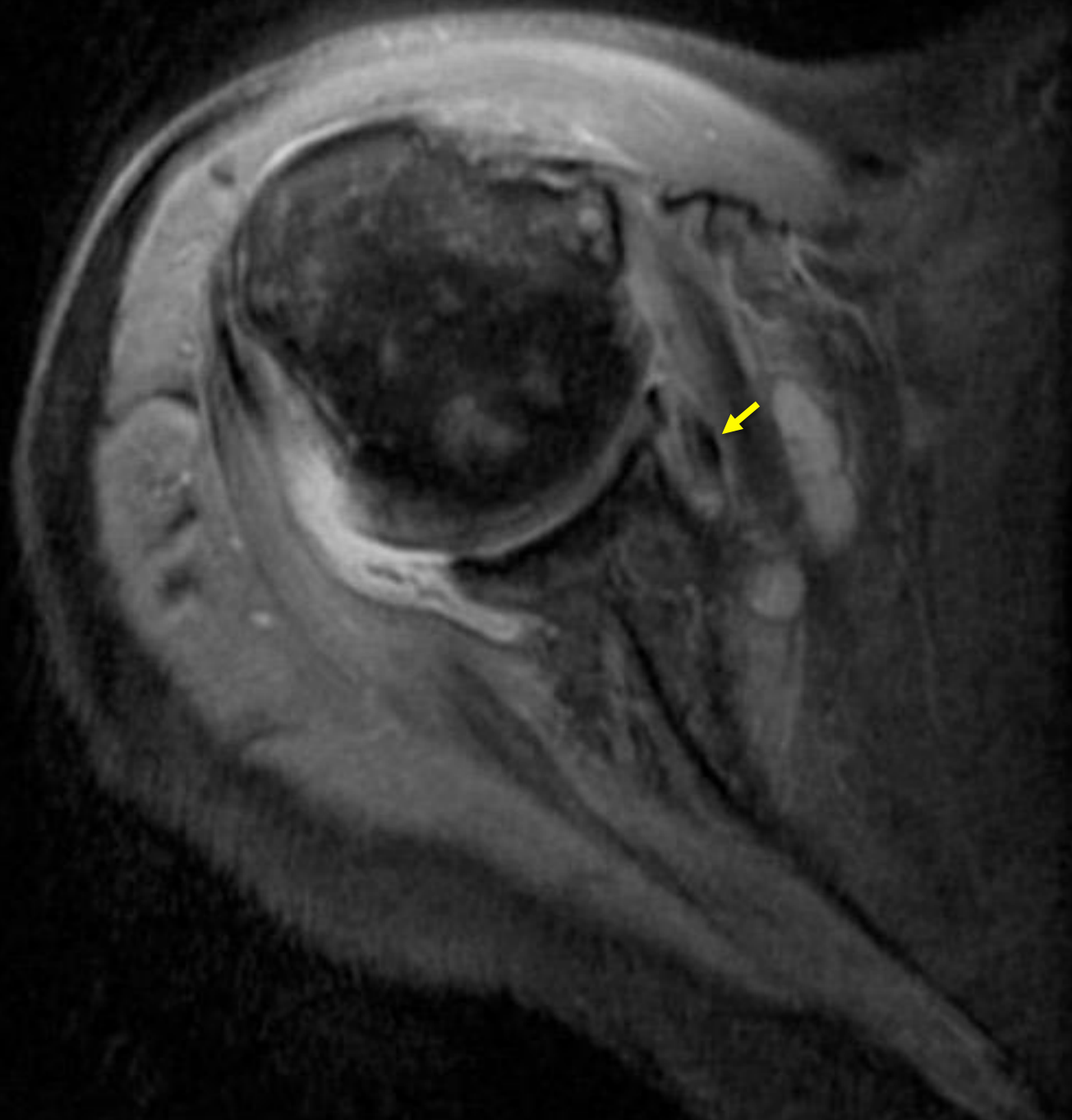


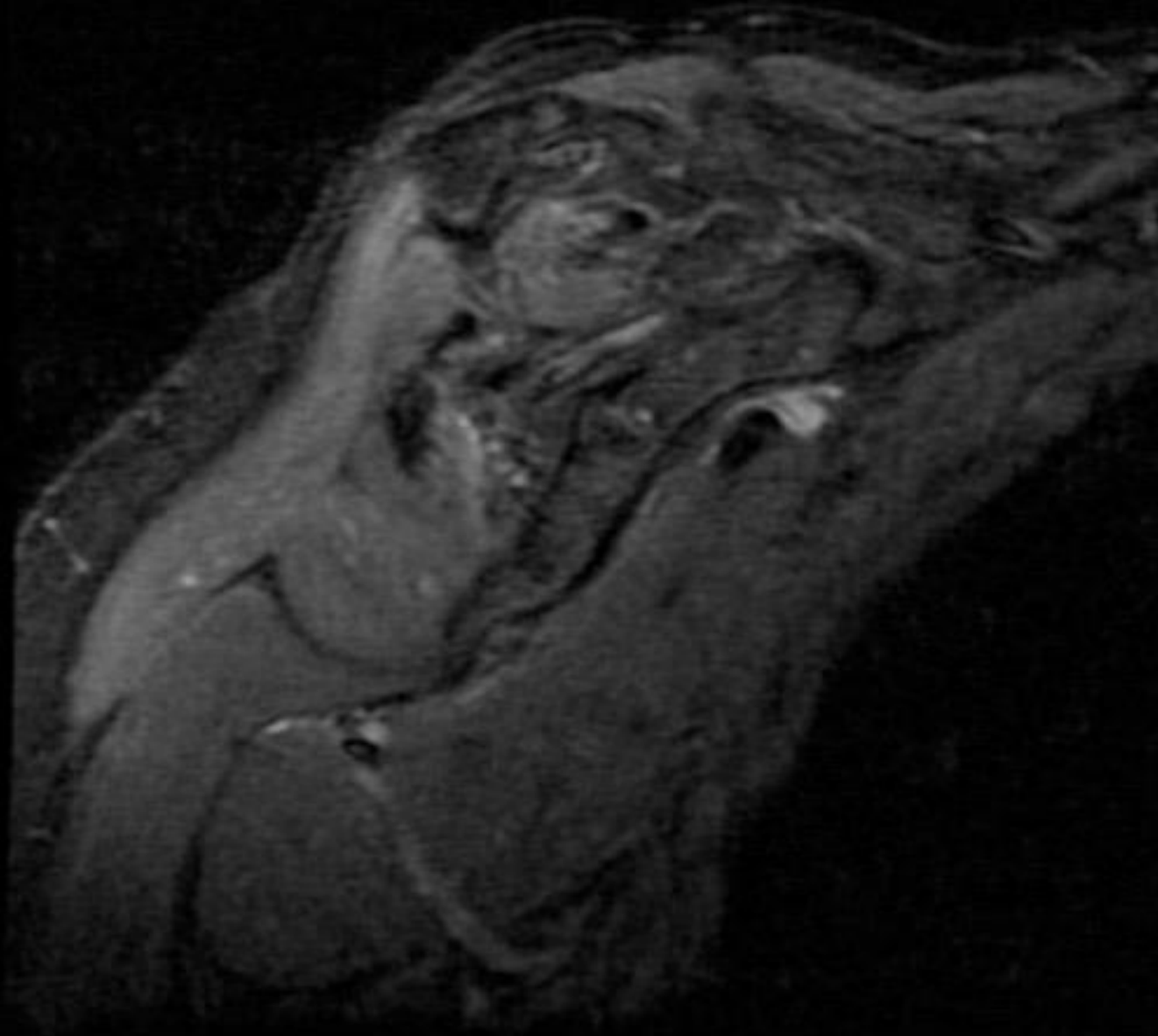


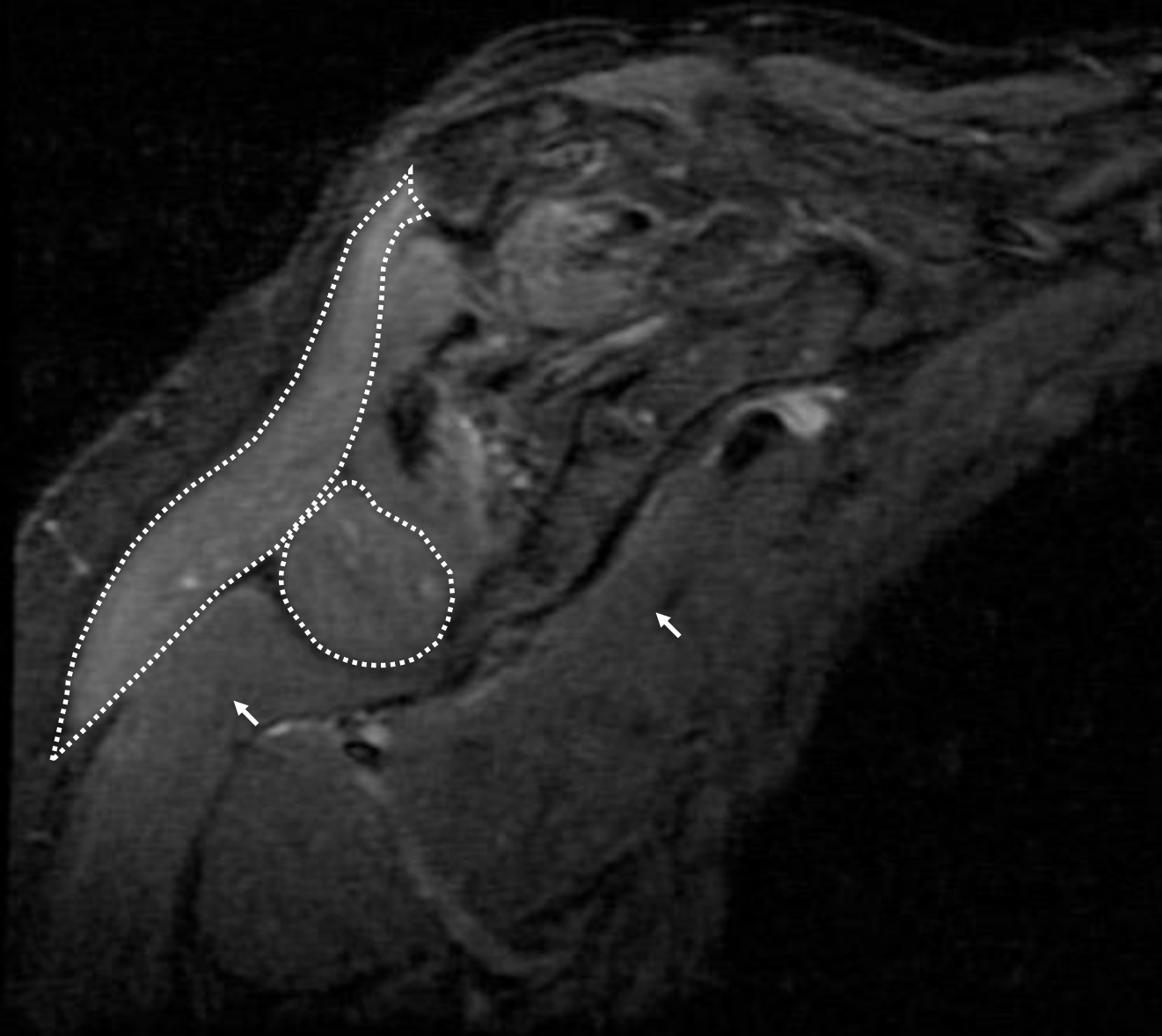


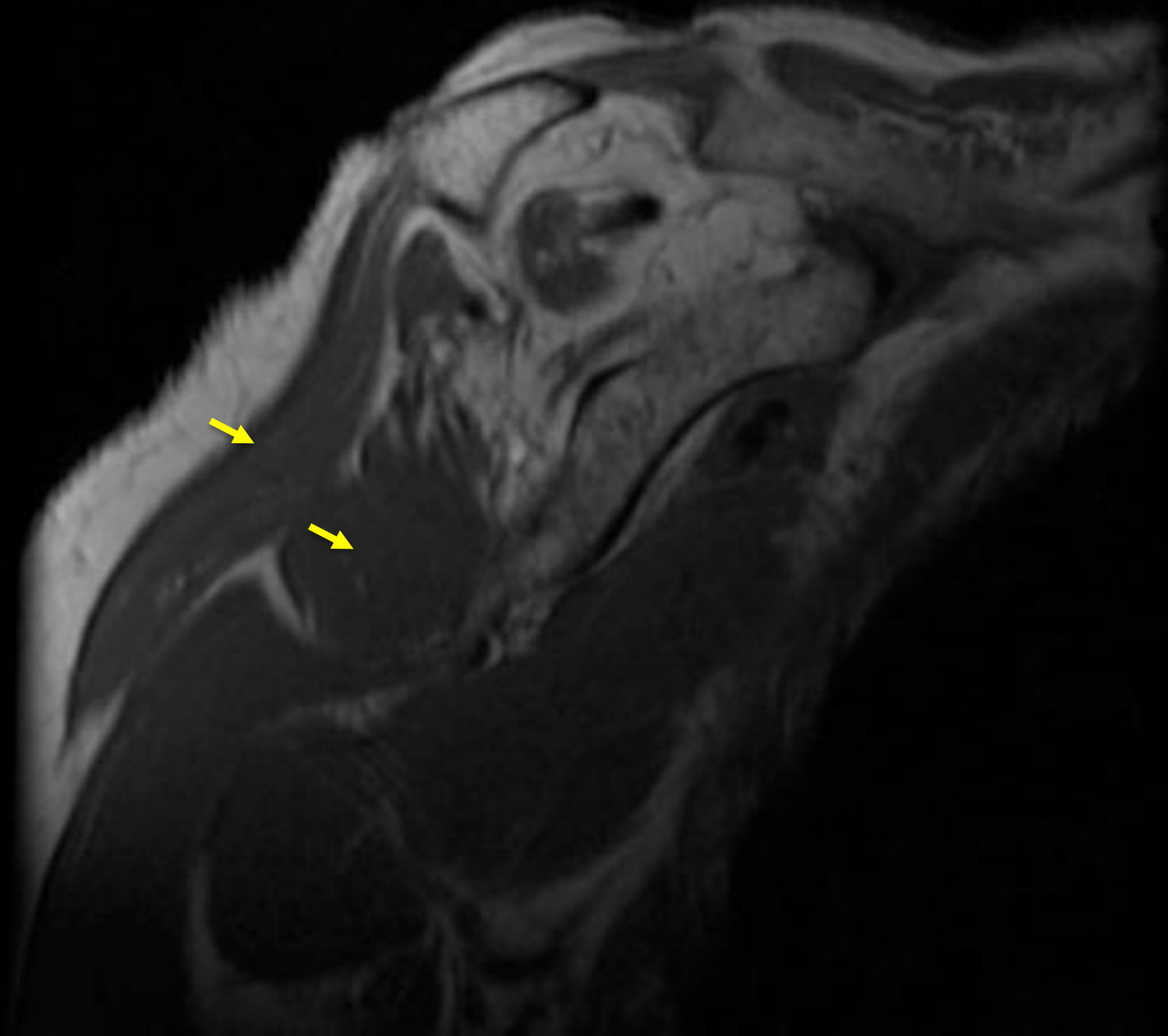






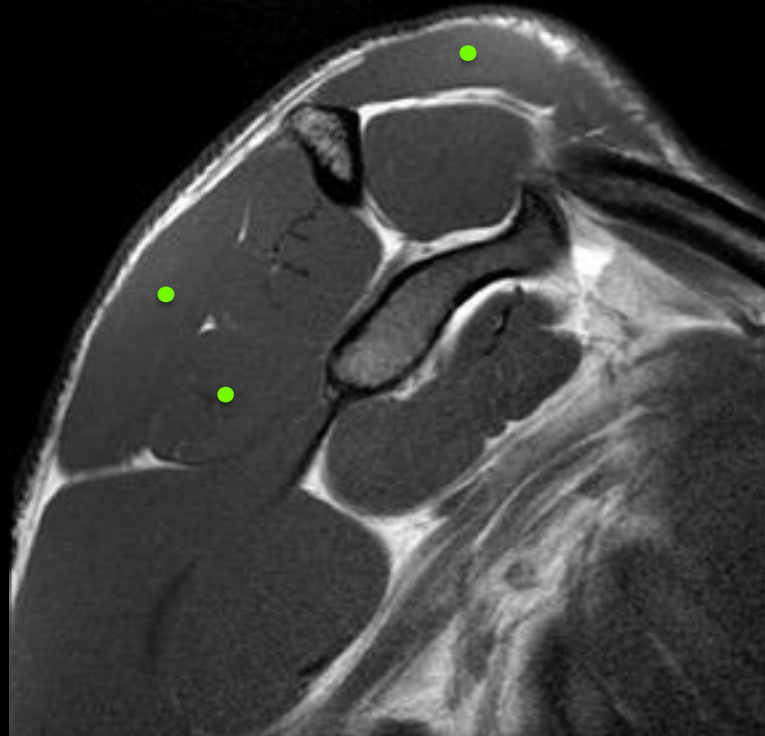
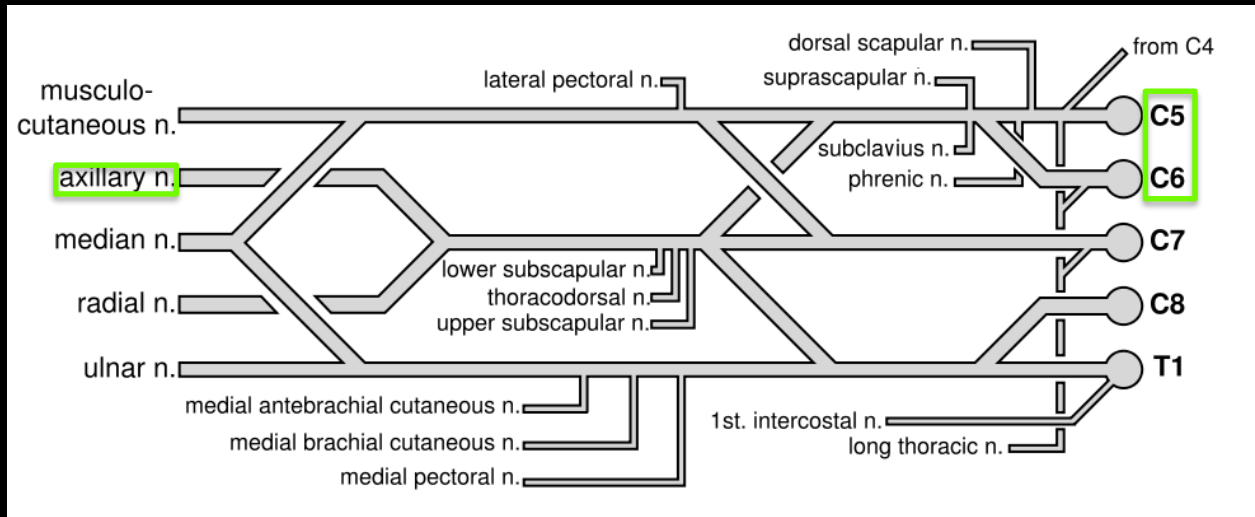


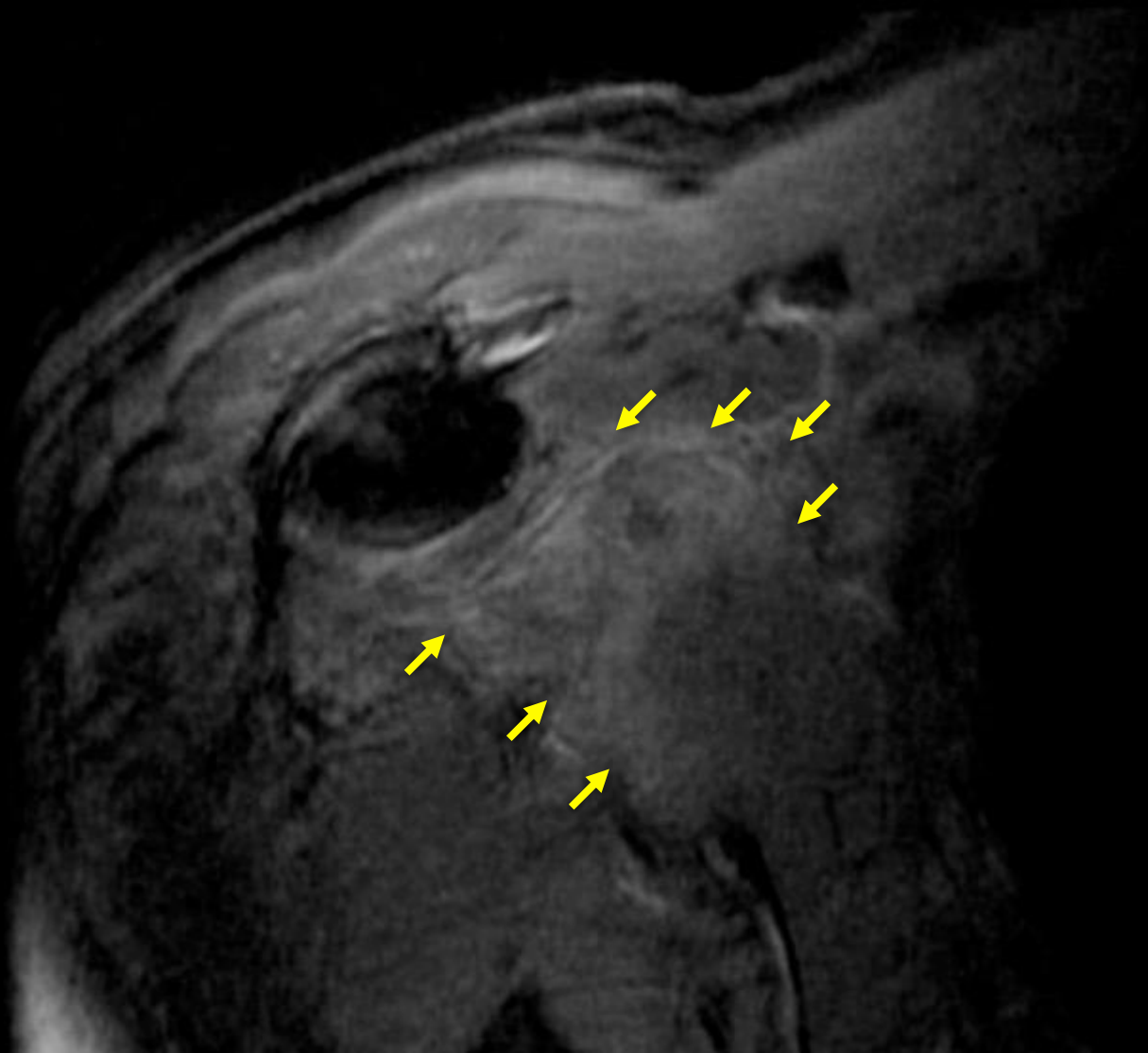




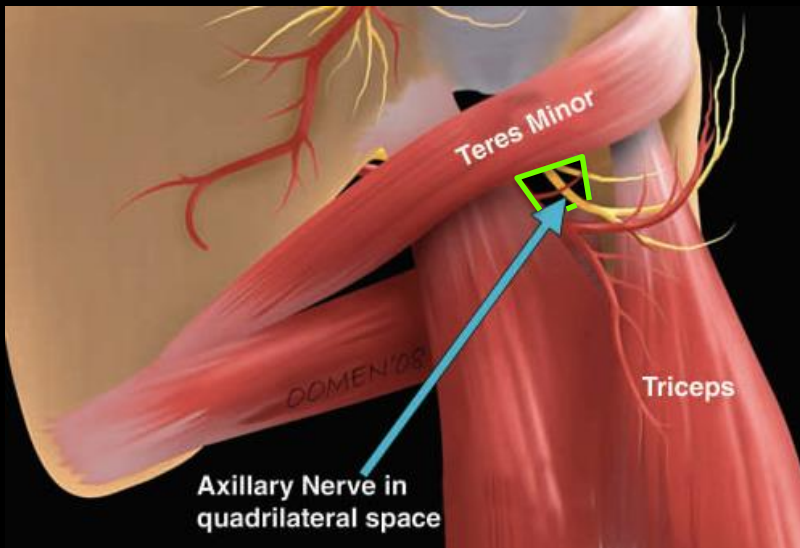
MRI Muscular Denervation Grading

- **acute stage** (< 1 month): high signal intensity within the muscle on fluid sensitive sequences without fatty infiltration or loss of muscle bulk
- subacute stage (1-6 months): mixed edema and fatty infiltration
- chronic stage (>6 months): diffuse fatty infiltration with loss of muscle bulk





Quadrilateral Space



teres minor muscle (superiorly), teres major muscle (inferiorly), long head of the triceps (medially), humeral neck (laterally);

circumflex artery and axillary nerve

Findings

- recent anterior glenohumeral dislocation, impact fracture at the greater tuberosity (Hill-Sachs), IGHL avulsion from both humeral and glenoid attachment sites, reactive edema of periarticular musculature.
- degenerative tearing of supraspinatus (full thickness), infraspinatus and subscapularis tendons; medial subluxation of the long head of the biceps tendon

Findings

- extensive hematoma in the region of the quadrilateral space, muscular edema isolated to the lateral deltoid and teres minor without muscle atrophy.

Diagnosis

Possible mechanisms of axillary nerve injury are:

- hematoma within quadrilateral space -> nerve compression
- inferior translation of humeral head -> nerve injury

9 to 18% of patients who had anterior dislocation suffer from prolonged pain due to axillary nerve injury.

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