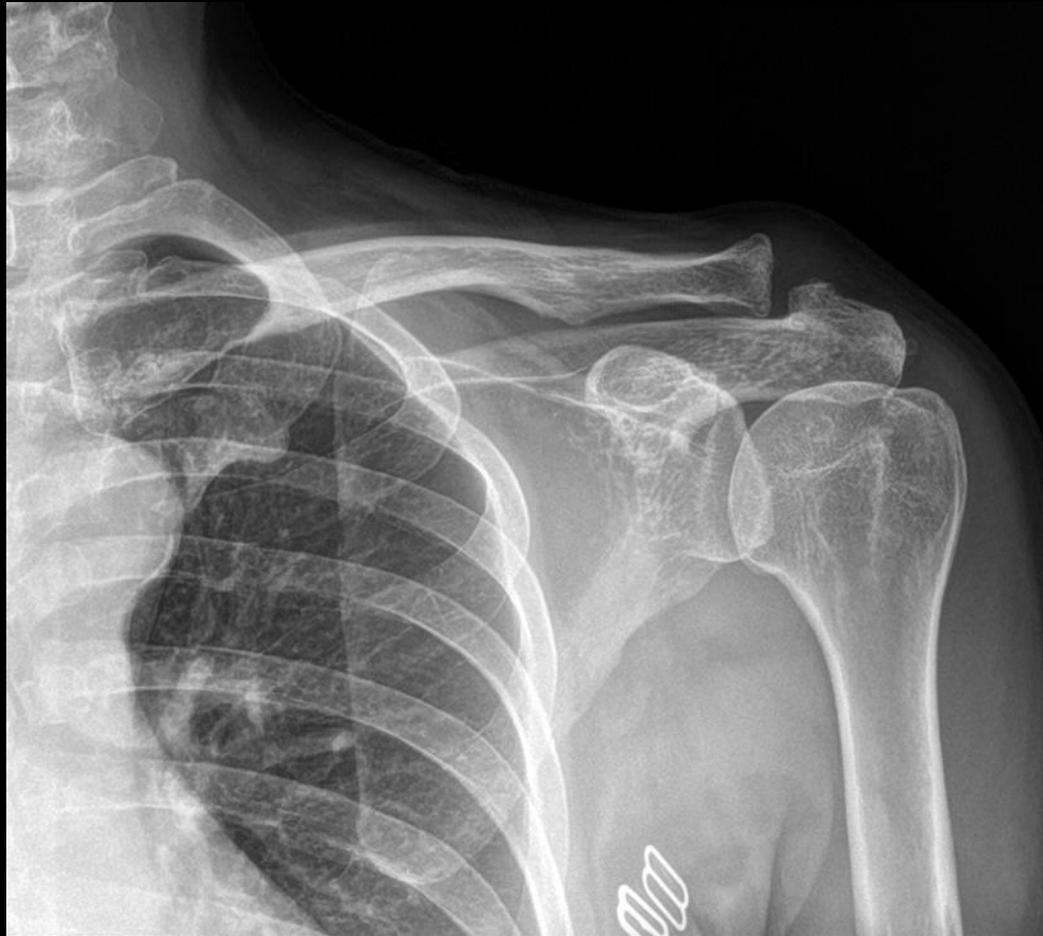
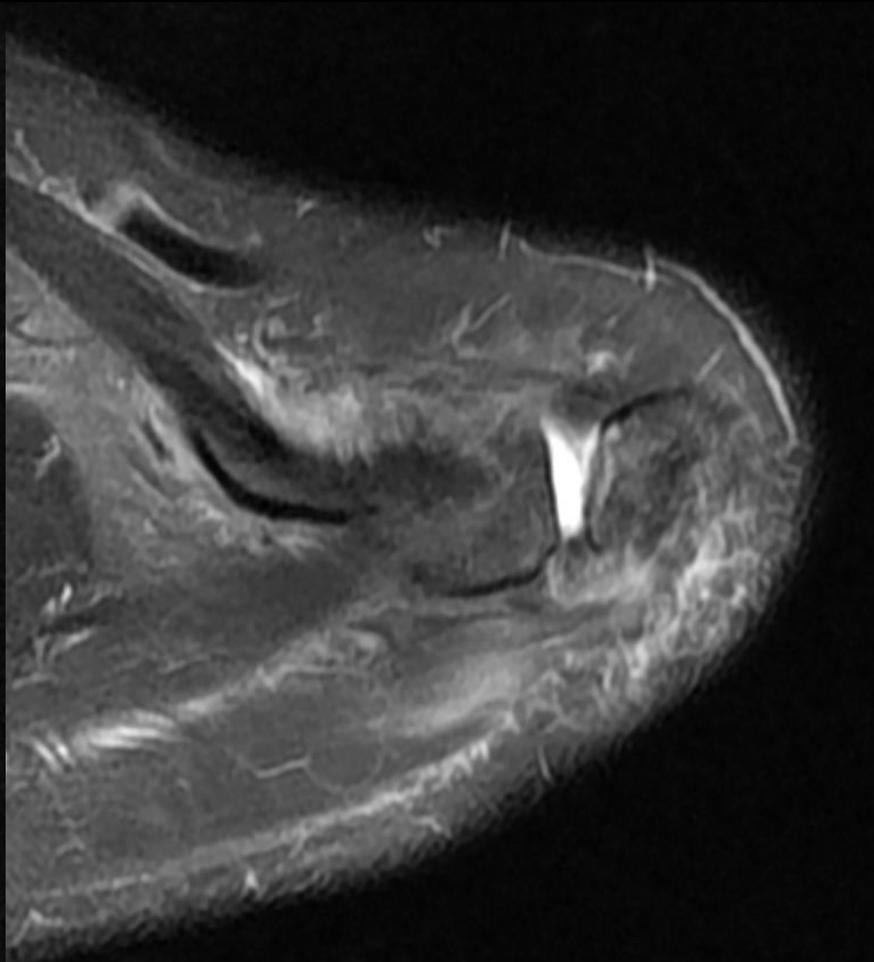
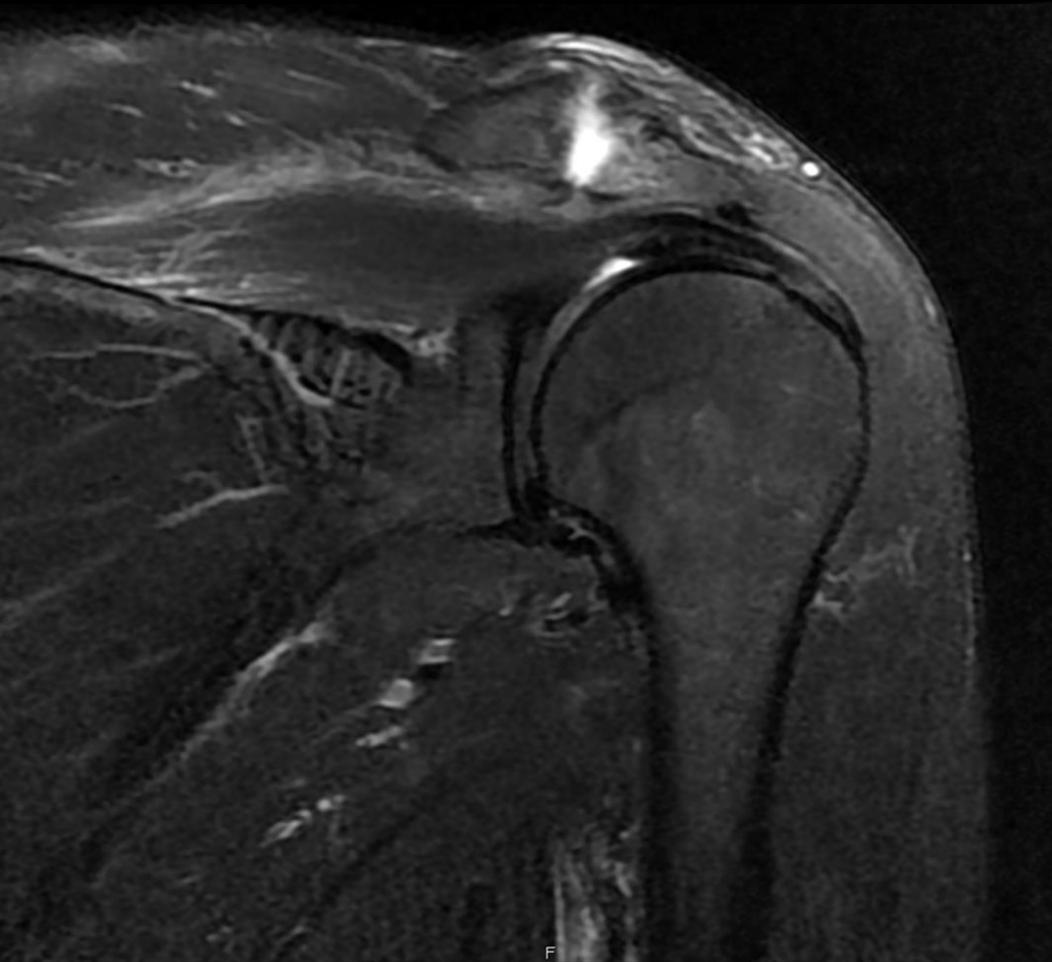


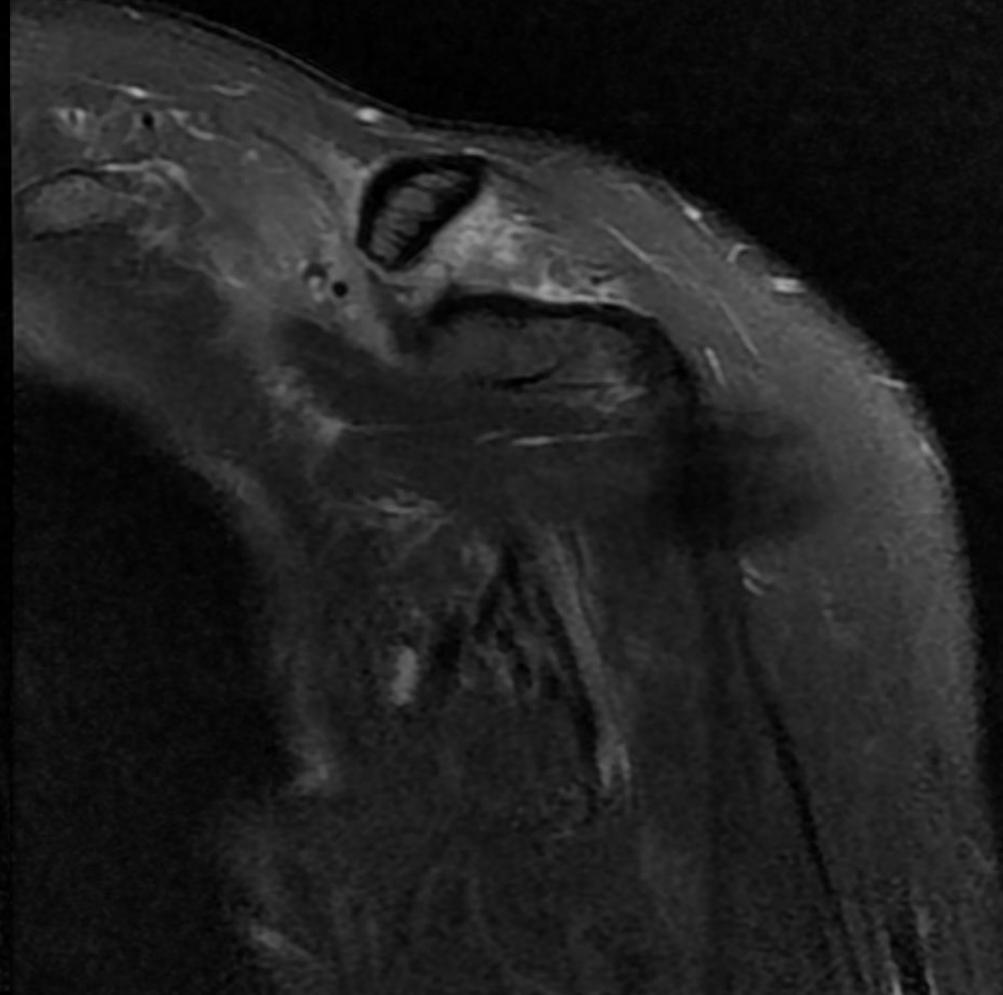
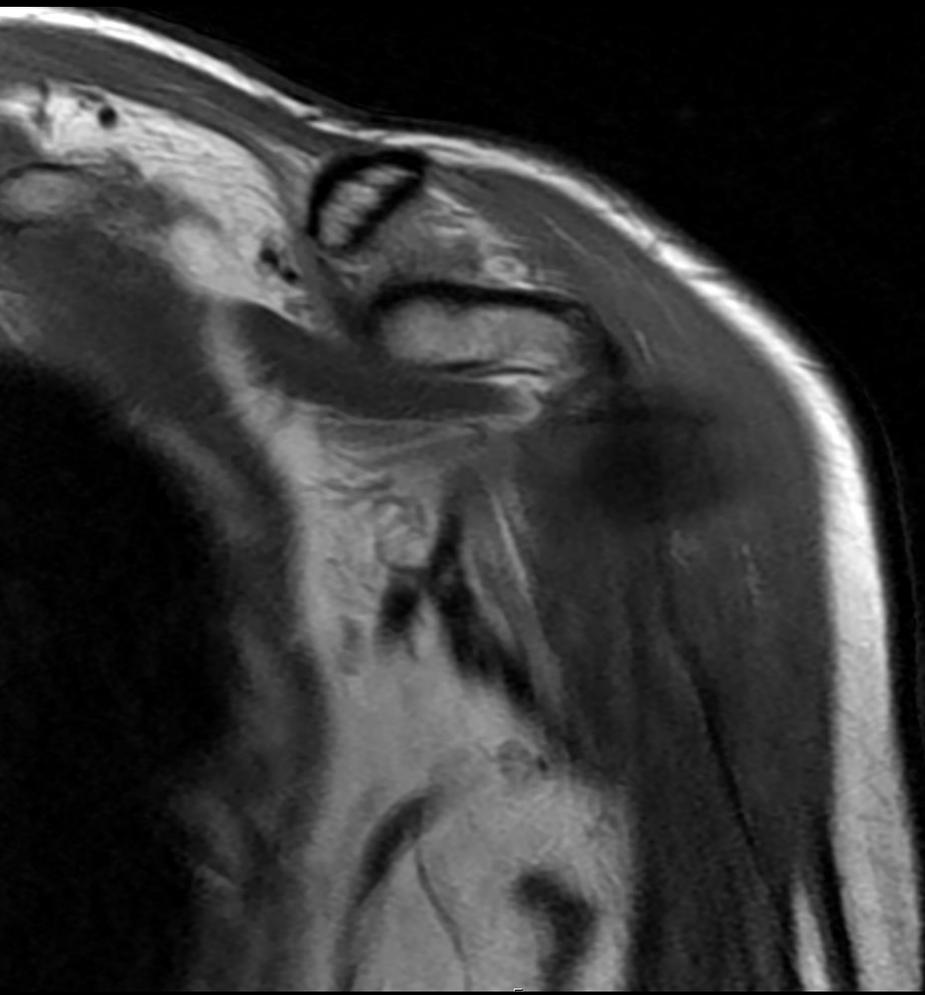


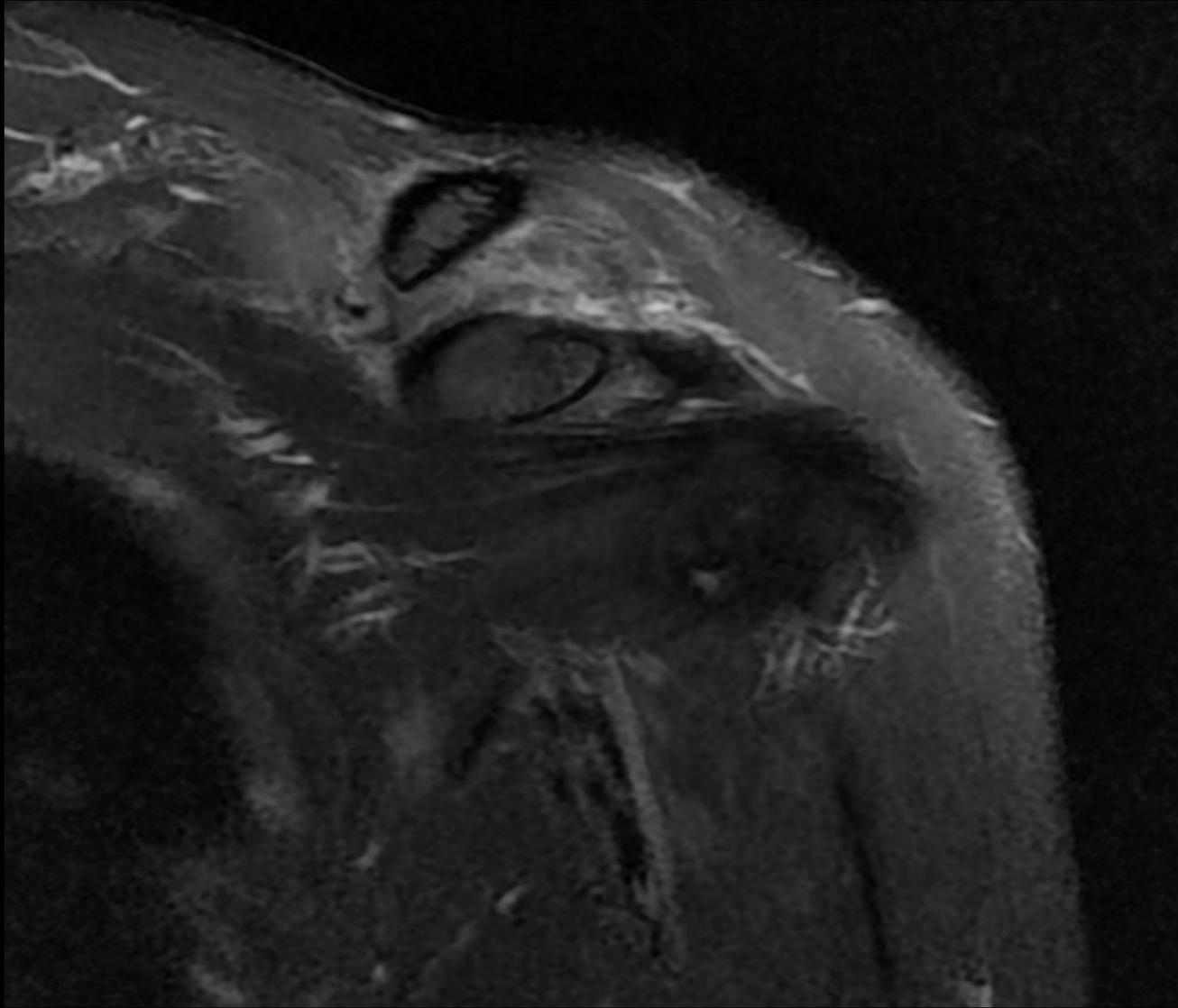
47 year-old female with history of  
motorcycle accident with left shoulder pain

Patcharee Hongsmatip (Visiting scholar, Thailand)



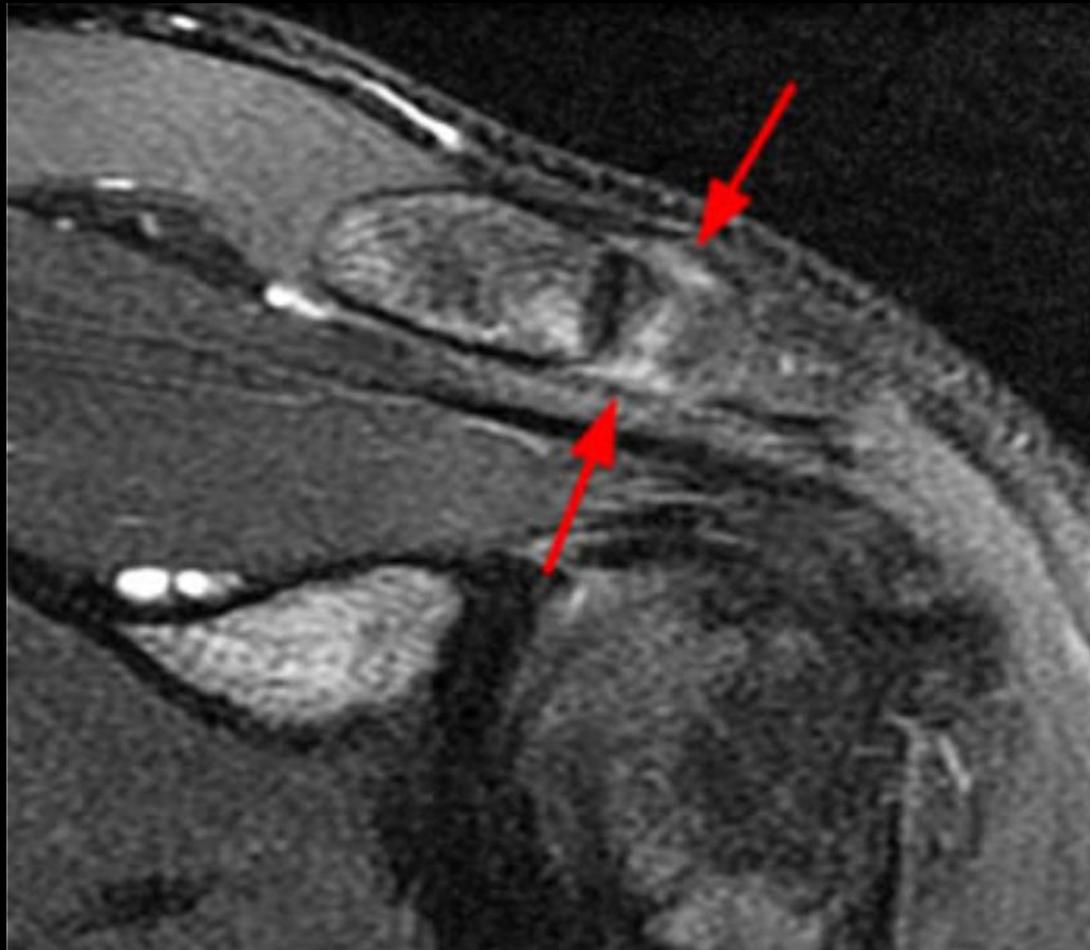




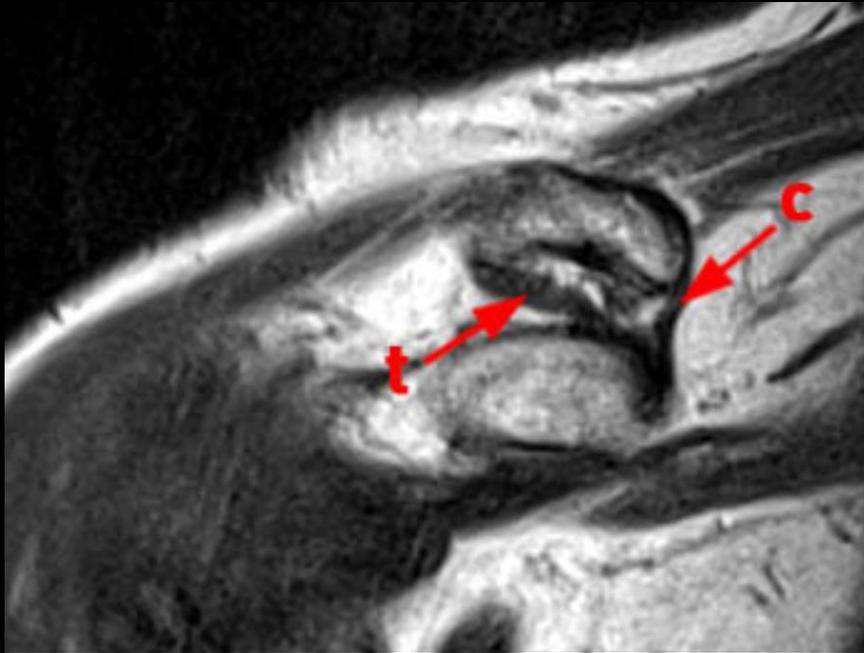


Acromioclavicular joint injury, grade 3

# Acromioclavicular ligament



# The coracoclavicular ligament complex



## Rockwood Classification of ACJ Dislocations

Grade of Injury	AC Ligaments	Joint Capsule	CC Ligaments	Trapezius and Deltoid Clavicular Attachments	Displacement of the Clavicle*	AC Distance	CC Distance
1	Partially torn superiodorsal ligament	Intact	Intact	Intact	None	Normal	Normal
2	Completely torn	Disrupted	Intact or sprained	Intact, minimally detached	50% superior	Widened	Slightly increased
3	Completely torn	Disrupted	Completely torn	Distal trapezius and deltoid may be torn	100% superior	Widened	Increased 25%–100%
4	Completely torn	Disrupted	Completely torn	Torn trapezius or button-holed clavicle posteriorly	Posterior (with or without superior displacement)	Can be normal	Can be normal
5	Completely torn	Disrupted	Completely torn	Distal trapezius and deltoid torn	>100% superior	Widened	Increased 100%–300%
6	Completely torn (sub-acromial and subcoracoid)	Disrupted	Completely torn (sub-coracoid type only)	Distal trapezius and deltoid torn	Inferior <sup>†</sup>	...	Negative

Note.—The injury grade depends on involvement of the dynamic and static stabilizers of the ACJ and the degree and direction of clavicular dislocation. AC = acromioclavicular, CC = coracoclavicular.

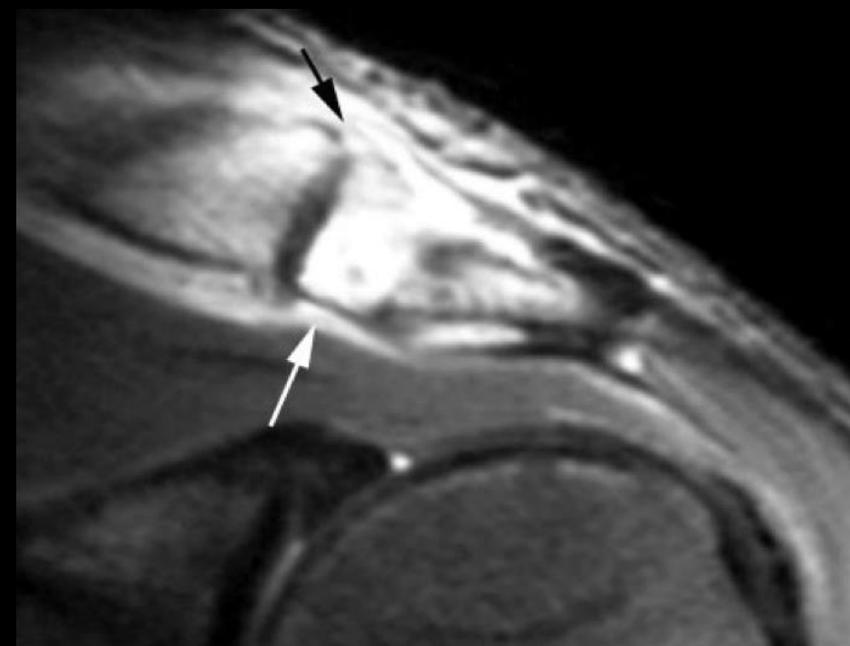
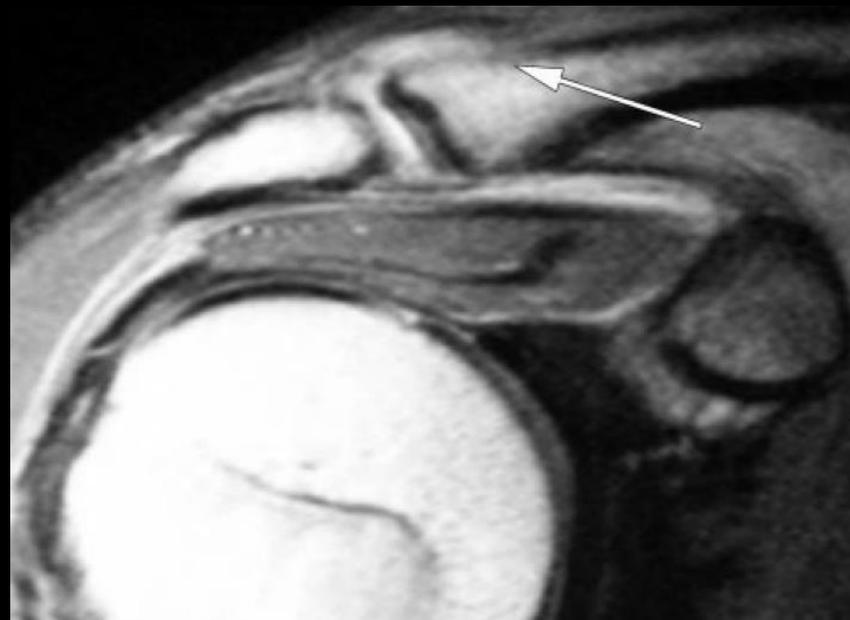
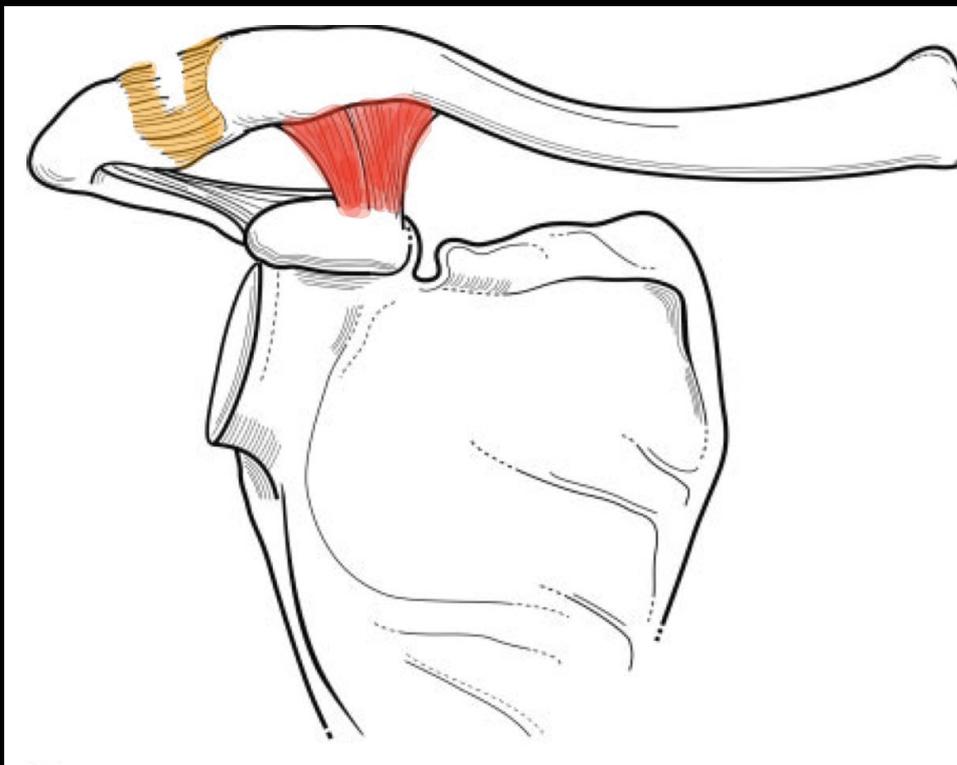
\*Relative to the inferior border of the acromion.

†Below the acromion or behind the biceps and coracobrachialis tendons.

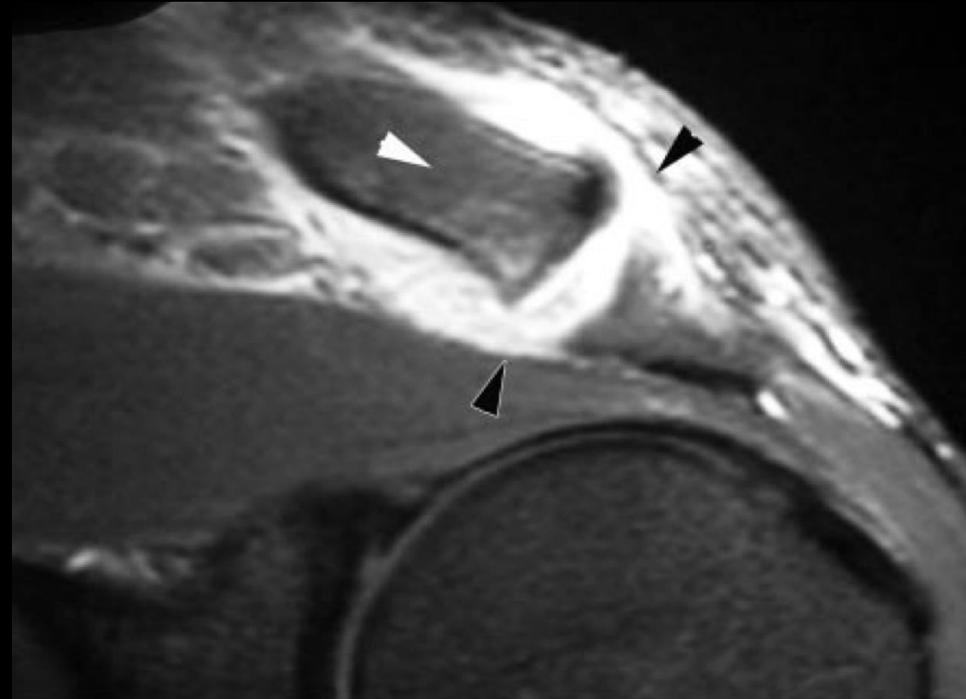
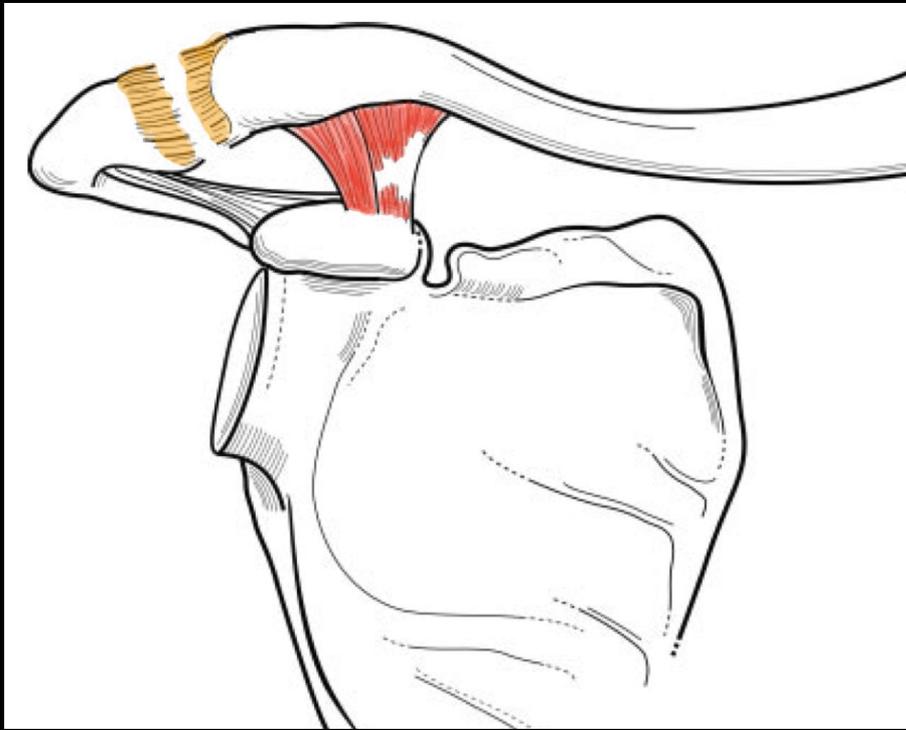
# Rockwood Classification of Acromioclavicular Joint Injury

Type	Acromioclavicular Ligament	Coracoclavicular Ligament	Acromioclavicular Dislocation	Deltotrapezial Fascia	Joint Capsule	Radiography
I	Sprained	Intact	None	Intact	Intact	Widening of acromioclavicular joint with stress
II	Torn	Intact	< 50% Acromioclavicular subluxation	Intact	Torn	Wide acromioclavicular joint
III	Torn	Torn	100% Superior subluxation	Intact	Torn	Wide acromioclavicular and coracoclavicular joints; superior position of distal clavicle by less than 50% shaft width
IV	Torn	Torn	100% Posterior subluxation	Torn	Torn	Distal clavicle posterior to acromion
V	Torn	Torn	> 100% Superior subluxation	Torn	Torn	More superiorly displaced clavicle than type III
VI	Torn	Torn	100% Inferior dislocation	Intact	Torn	Distal end of clavicle lies inferior to acromion

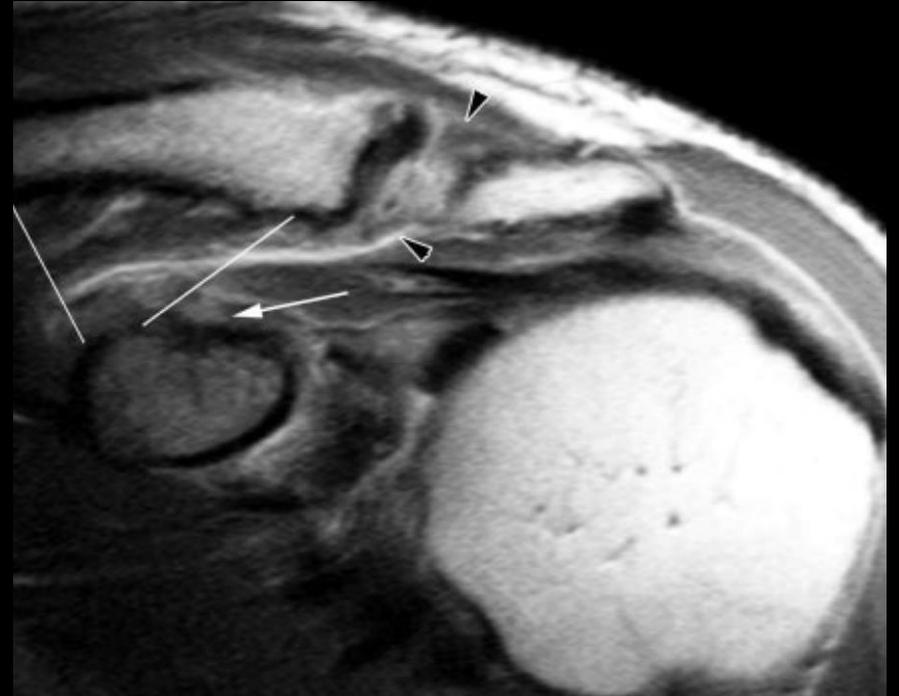
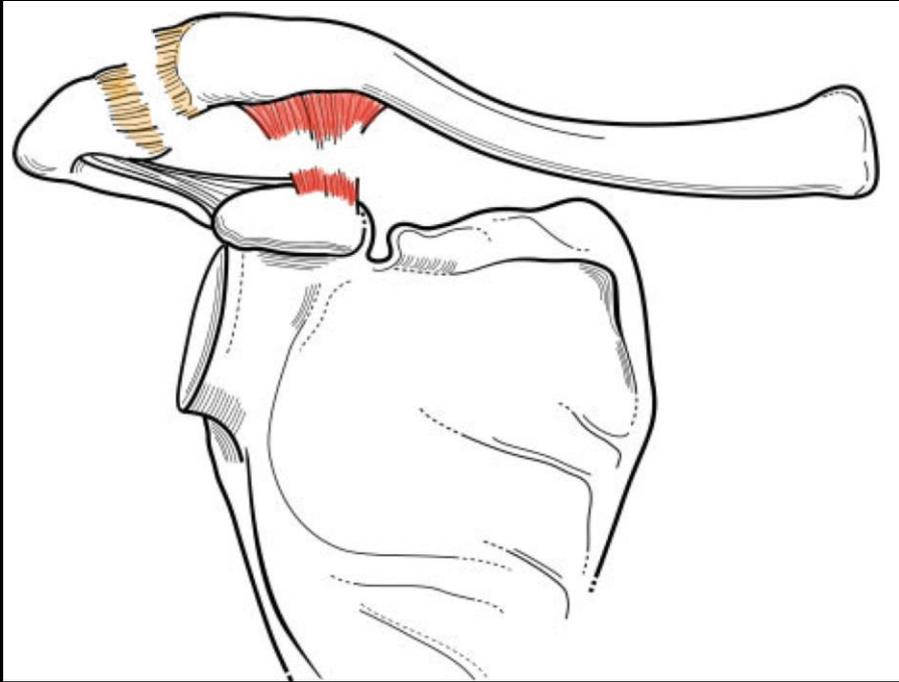
# Grade 1 injury



# Grade 2 injury



# Grade 3 injury



# Grade 4 injury

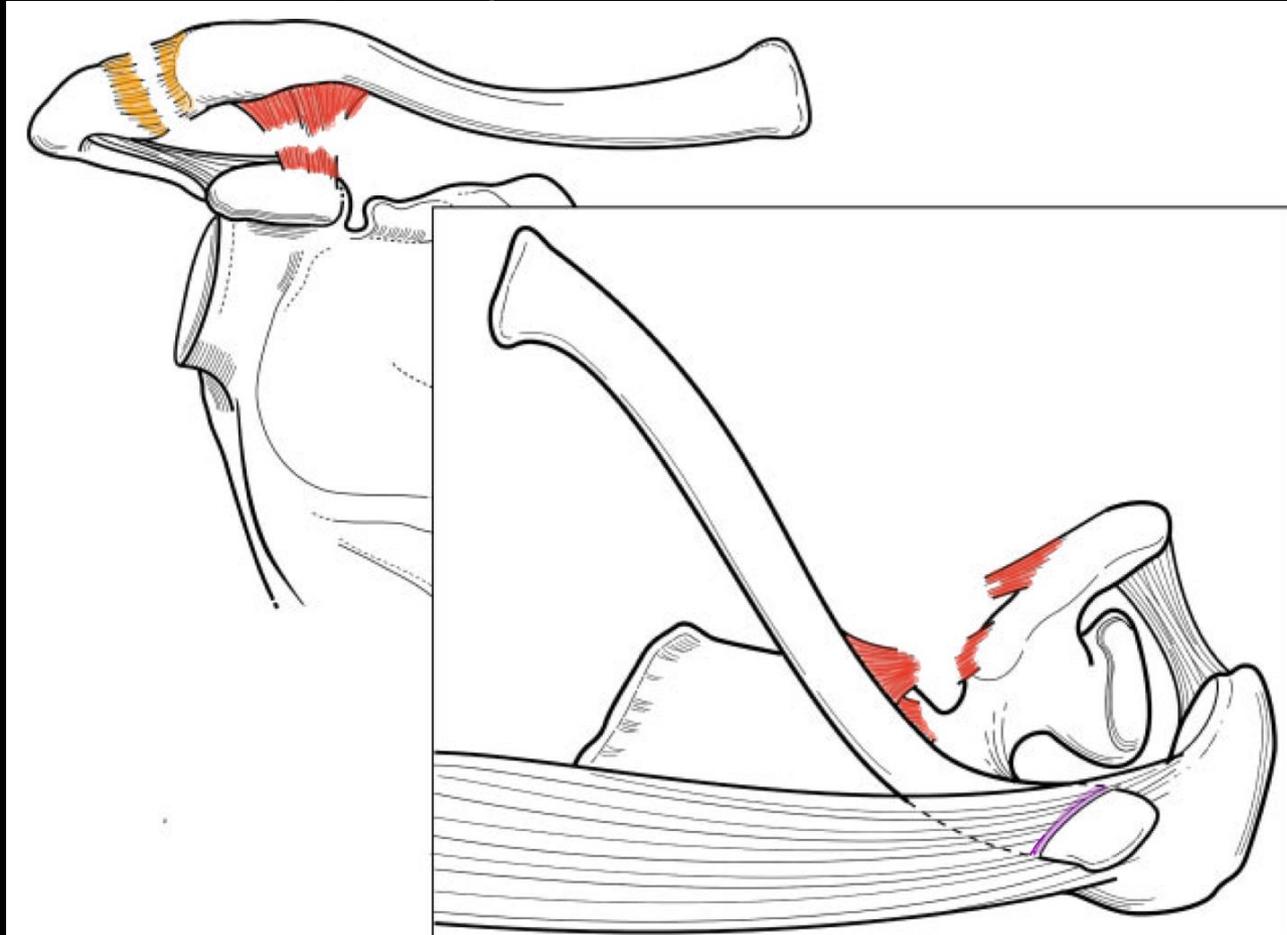
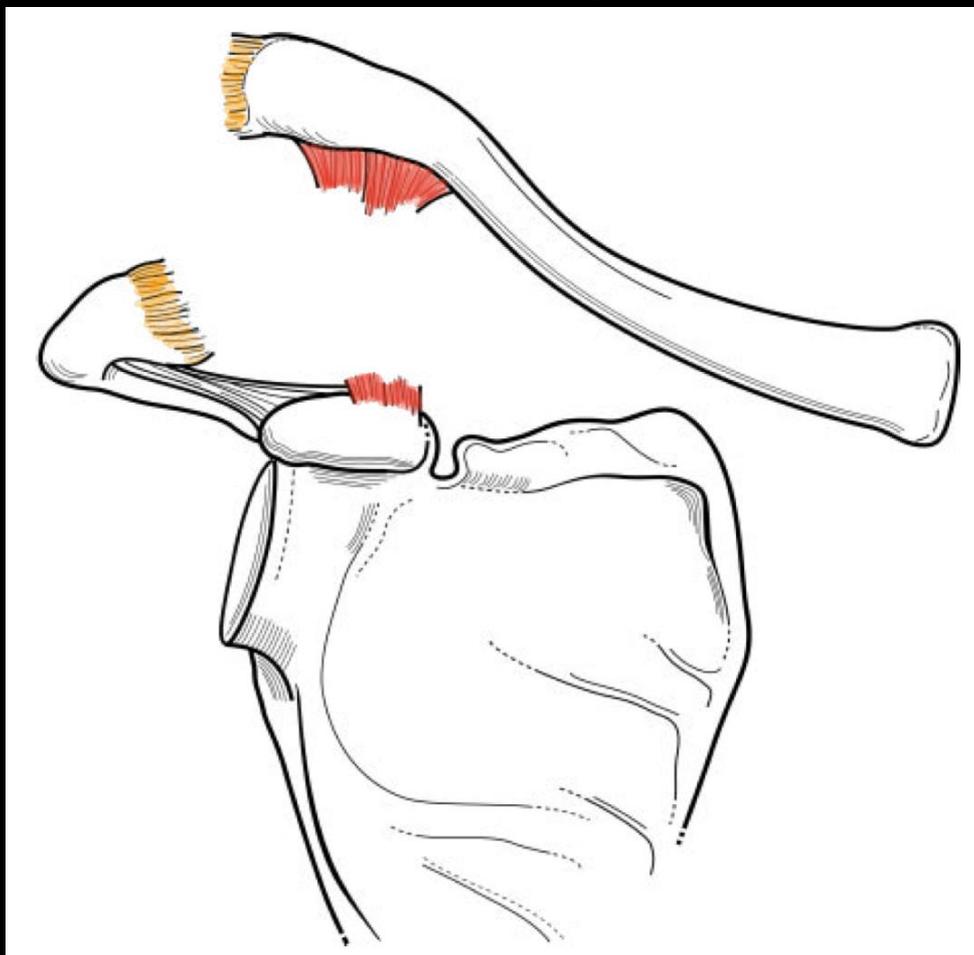
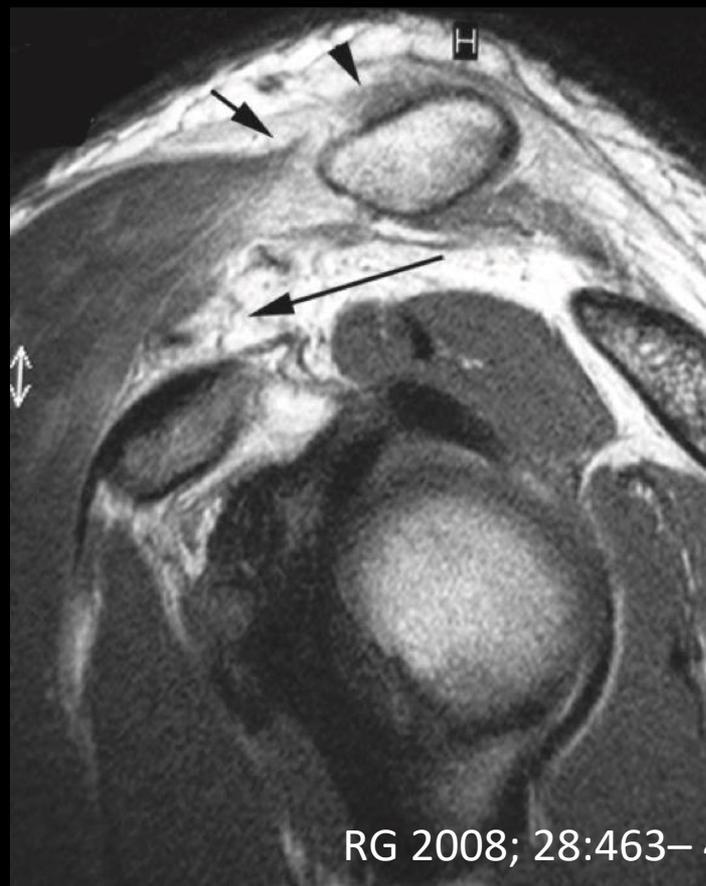
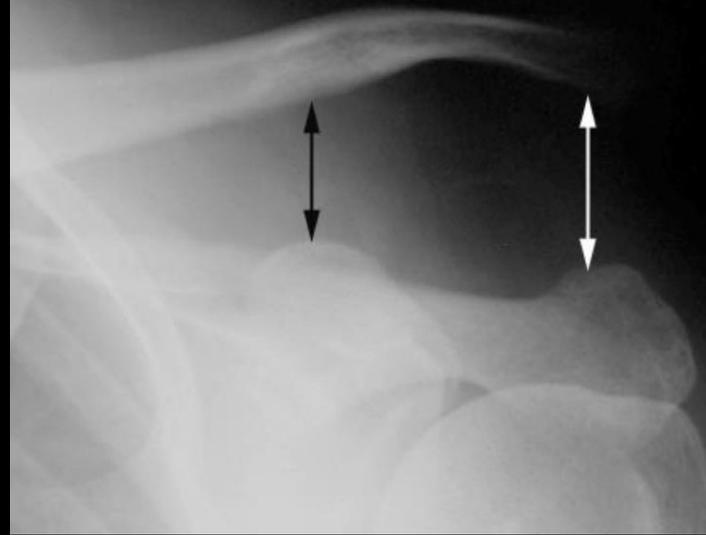


Diagram shows the features of a grade 4 injury: complete tears of the acromioclavicular and coracoclavicular ligaments with the clavicle dislocated posteriorly into or through the trapezius

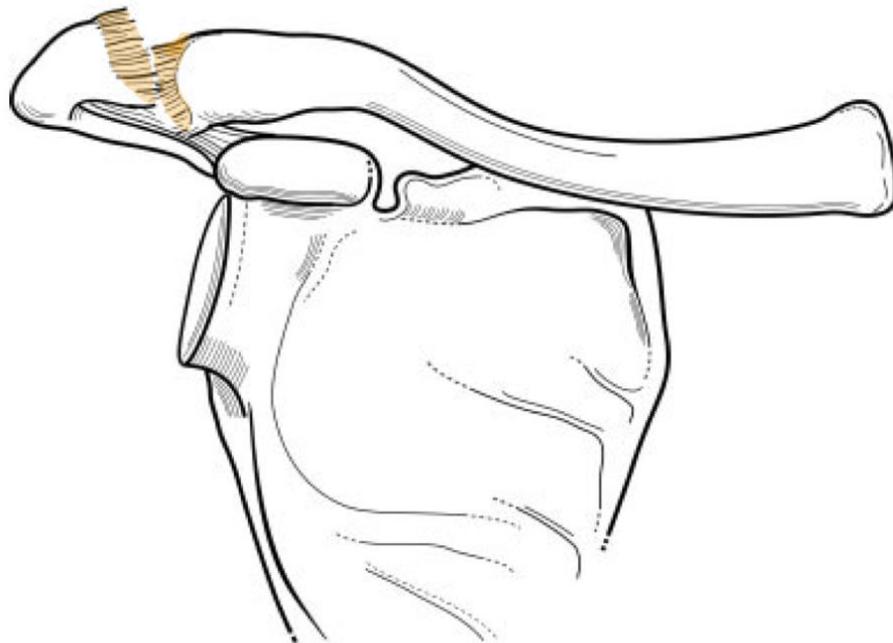
# Grade 5 injury



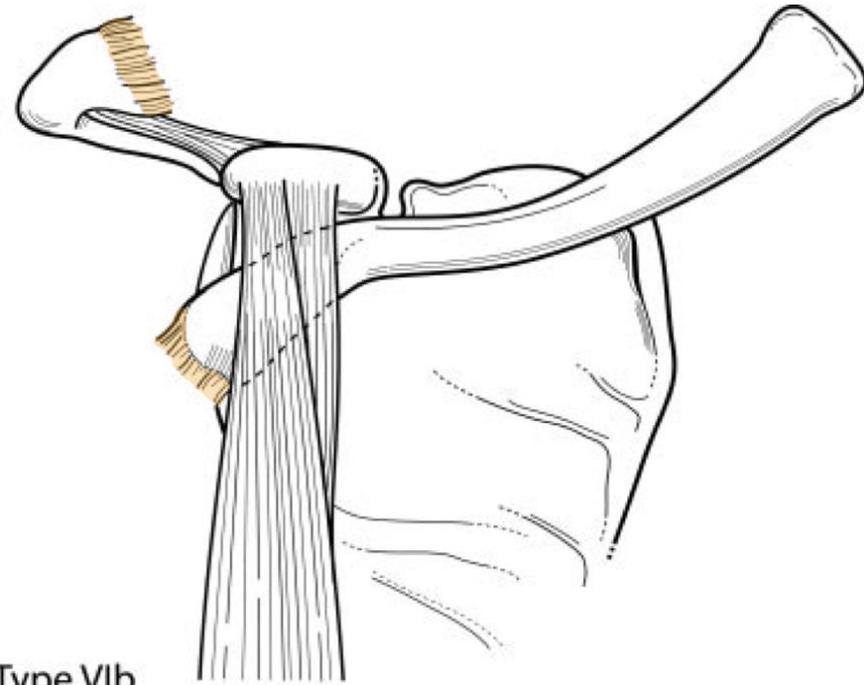
Complete tears of the acromioclavicular and coracoclavicular ligaments along with tears of the trapezius and deltoid insertions with separation of the ACJ.



# Grade 6 injury



Type VIa



Type VIb

Type 6a injury results in inferior subluxation of the clavicle relative to the acromion along with tears of the acromioclavicular ligaments.

Type 6b injury results in subcoracoid dislocation of the clavicle as well as tears of the coracoclavicular ligaments.

# Treatment

Grade 1 and 2 ACJ injuries: non-operative treatment

Grade 3 ACJ injury: controversial. Many published reports have shown that non-operative treatment for Grade 3 injuries provides satisfactory results for most patients.

Grades 4-6 and open ACJ injuries: indicate for surgical treatment

Surgical treatment mainly involves the following fundamentals: primary fixation across the AC joint, dynamic muscle transfer, fixation between the clavicle and the coracoid, and ligament reconstruction.

# References

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2. Ha A, Petscavage-Thomas J, Tagoylo G. Acromioclavicular Joint: The Other Joint in the Shoulder. *AJR* 2014; 202:375–385
3. Alyas F, Curtis M, Speed C, Saifuddin A, Connell D. Imaging Appearances of Acromioclavicular Joint Dislocation. *RadioGraphics* 2008; 28:463– 479
4. Rockwood CAJ, Young DC. Disorders of the acromioclavicular joint. In: Rockwood CAJ, Matsen FAI, eds. *The Shoulder*. Philadelphia: WB Saunders, 1990; 413–476