

Shoulder Girdle Trauma - Scapula & Scapulothoracic



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Disclosures

None

Objectives

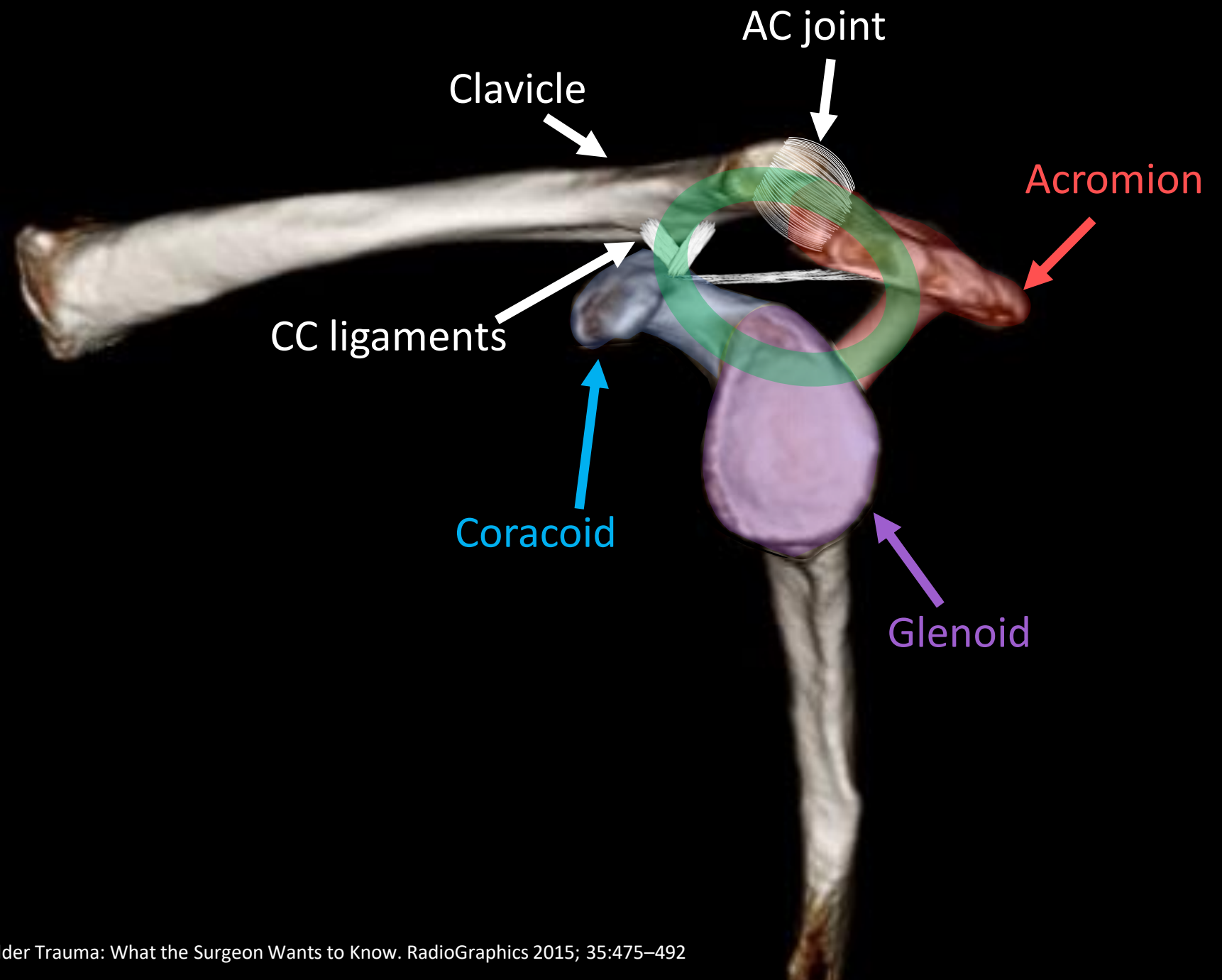
- Relevant anatomy
- How to disconnect the arm from the trunk:
 1. Scapular fractures and the Superior Shoulder Suspensory Complex (SSSC) and the “floating shoulder”
 2. Scapulothoracic dissociation

Attaching the arm...

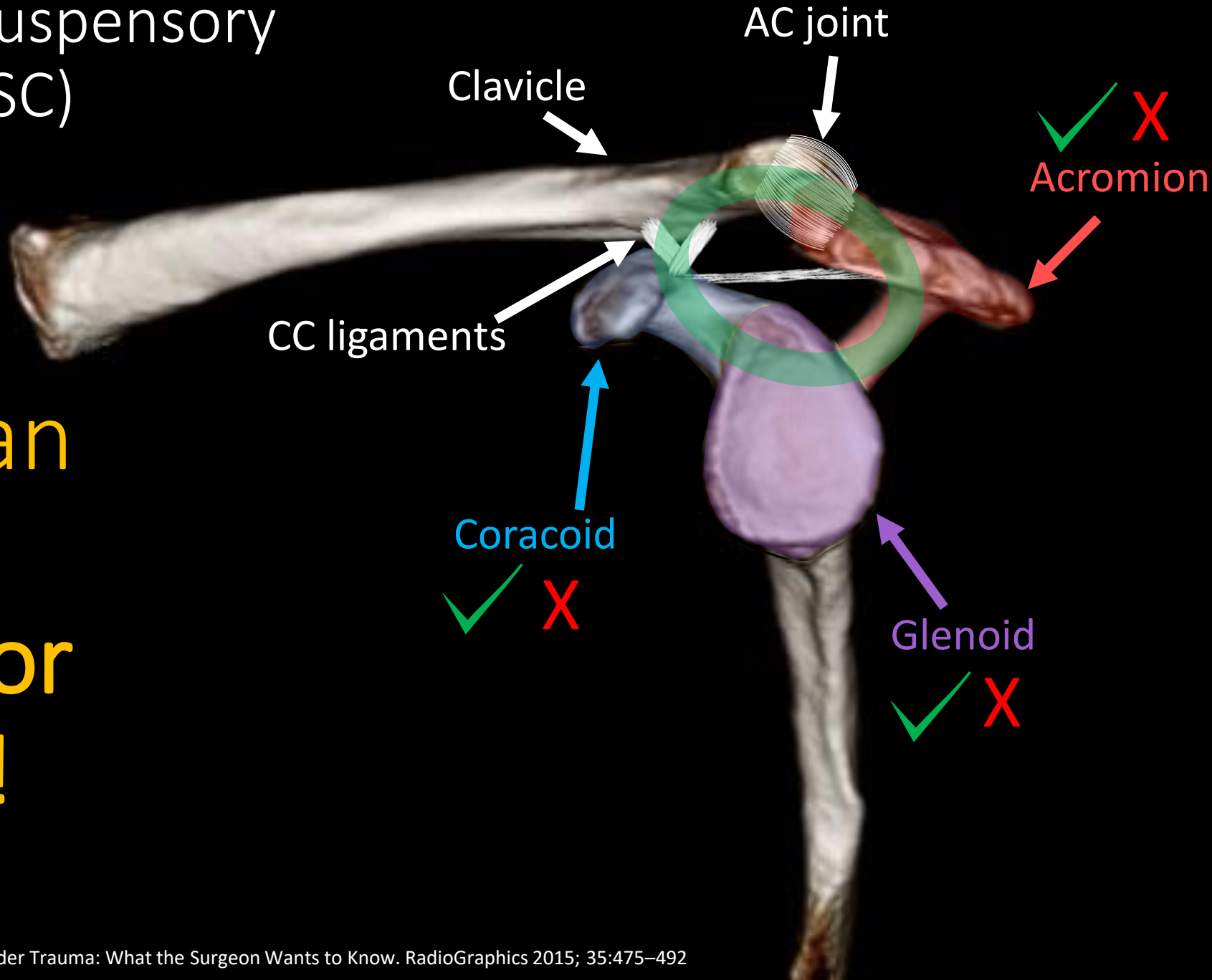
Upper limb is connected to the trunk by **3 joints**:

1. Glenohumeral joint
2. Acromioclavicular joint
3. Scapulothoracic "joint"





Superior Shoulder Suspensory Complex (SSSC)



SSSC: it's an injury checklist for scapula!!

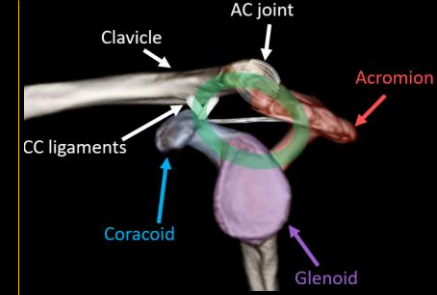
Superior Shoulder Suspensory Complex (SSSC)



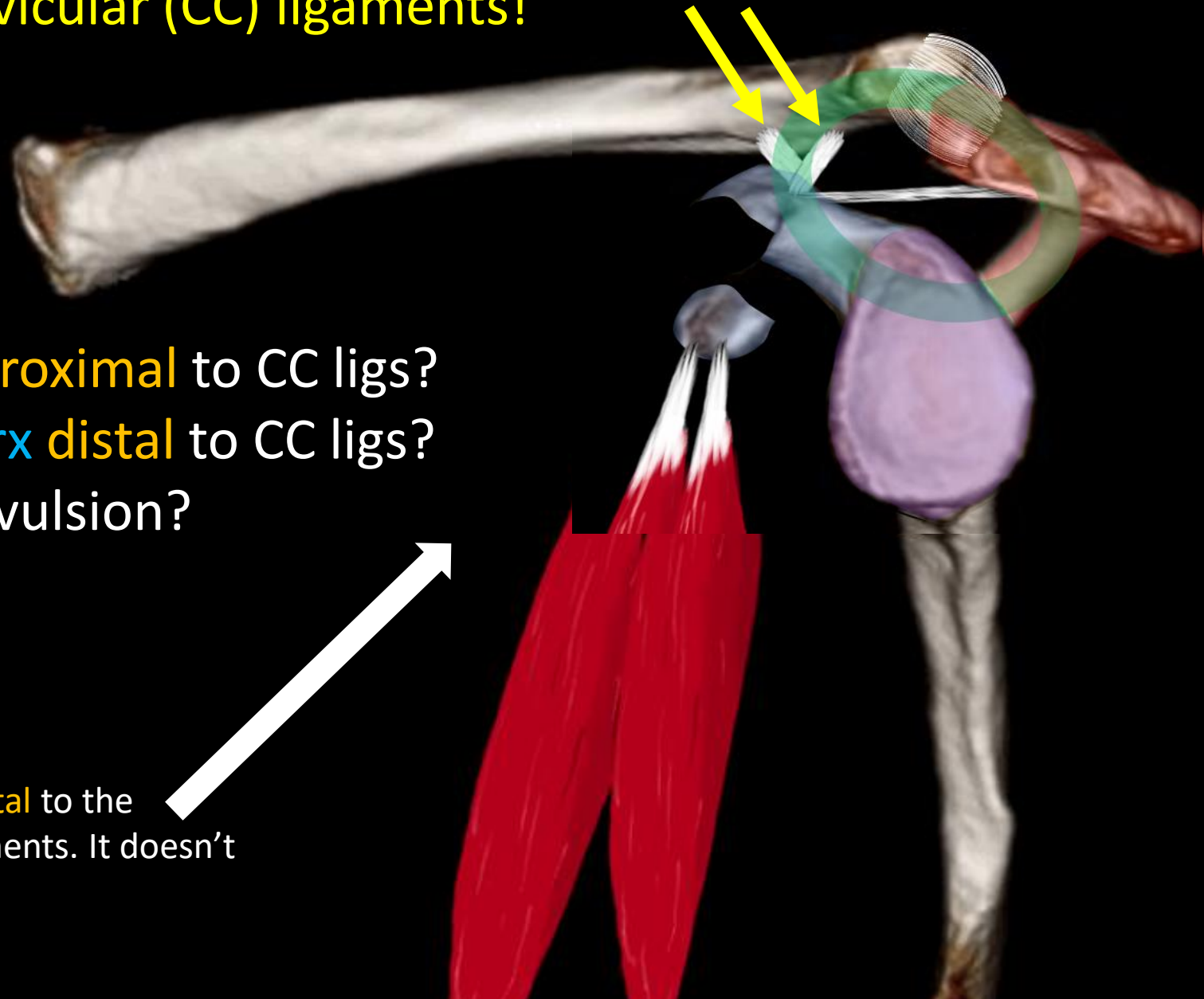
glenoid neck*

Break this ring in **two or more places** and you **might** have a “floating shoulder”

1 Coracoid fracture: watch the coracoclavicular (CC) ligaments!



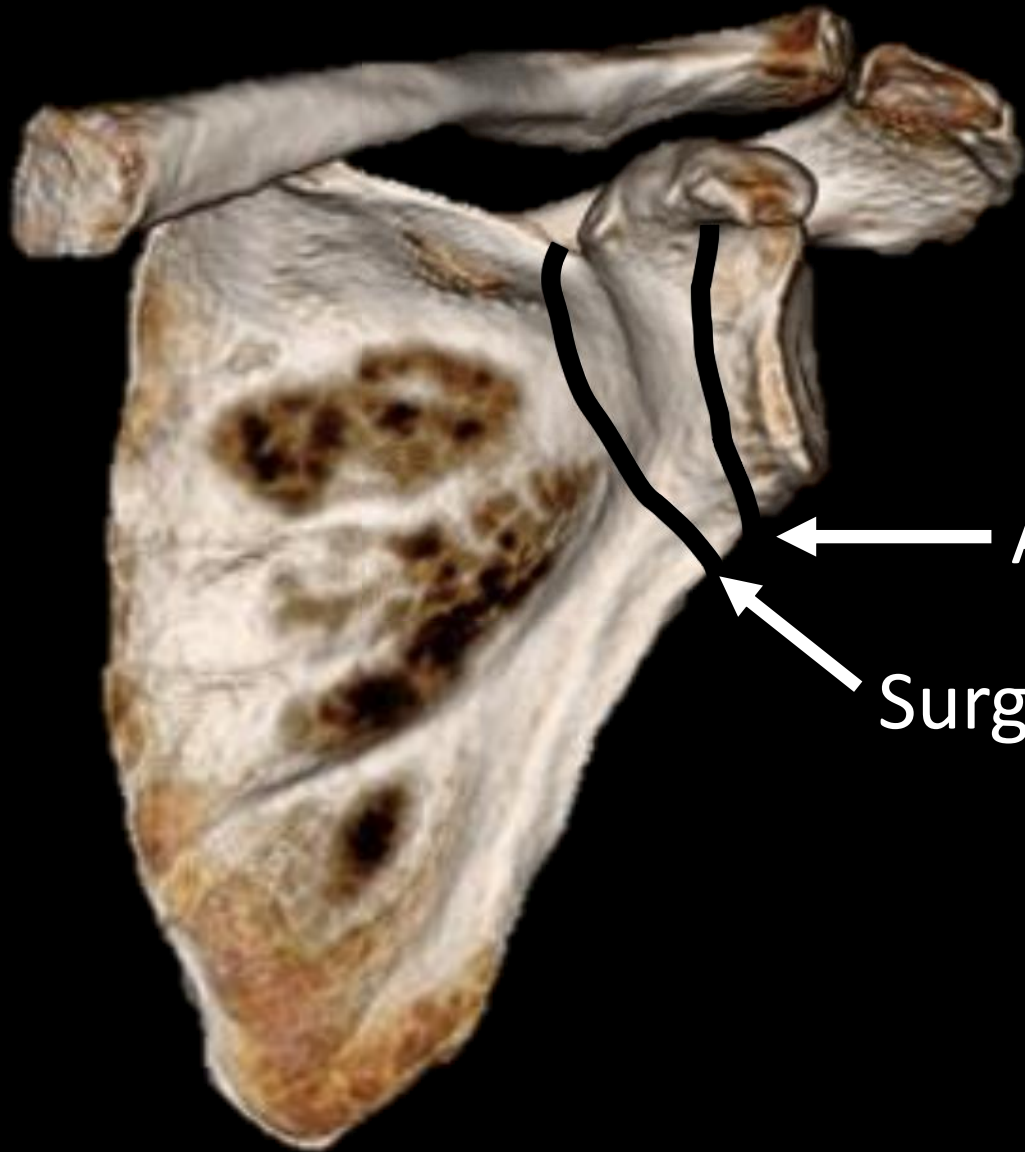
CC ligaments



- Coracoid frx **proximal** to CC lig?
- Coracoid tip frx **distal** to CC lig?
- CC ligament avulsion?

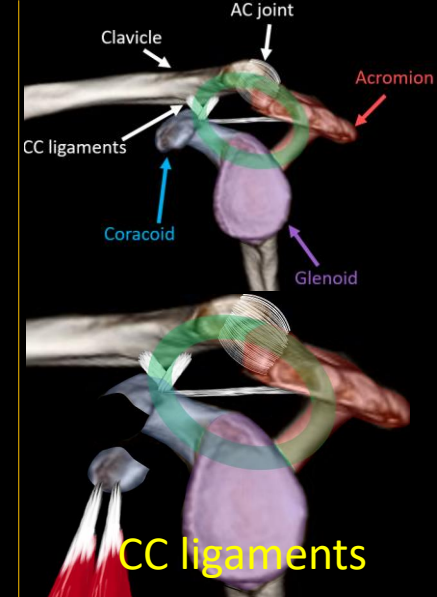
This tip fracture is **distal** to the coracoclavicular ligaments. It doesn't involve the **ring** at all!

2 Glenoid neck fractures: 2 main types



← Anatomic neck

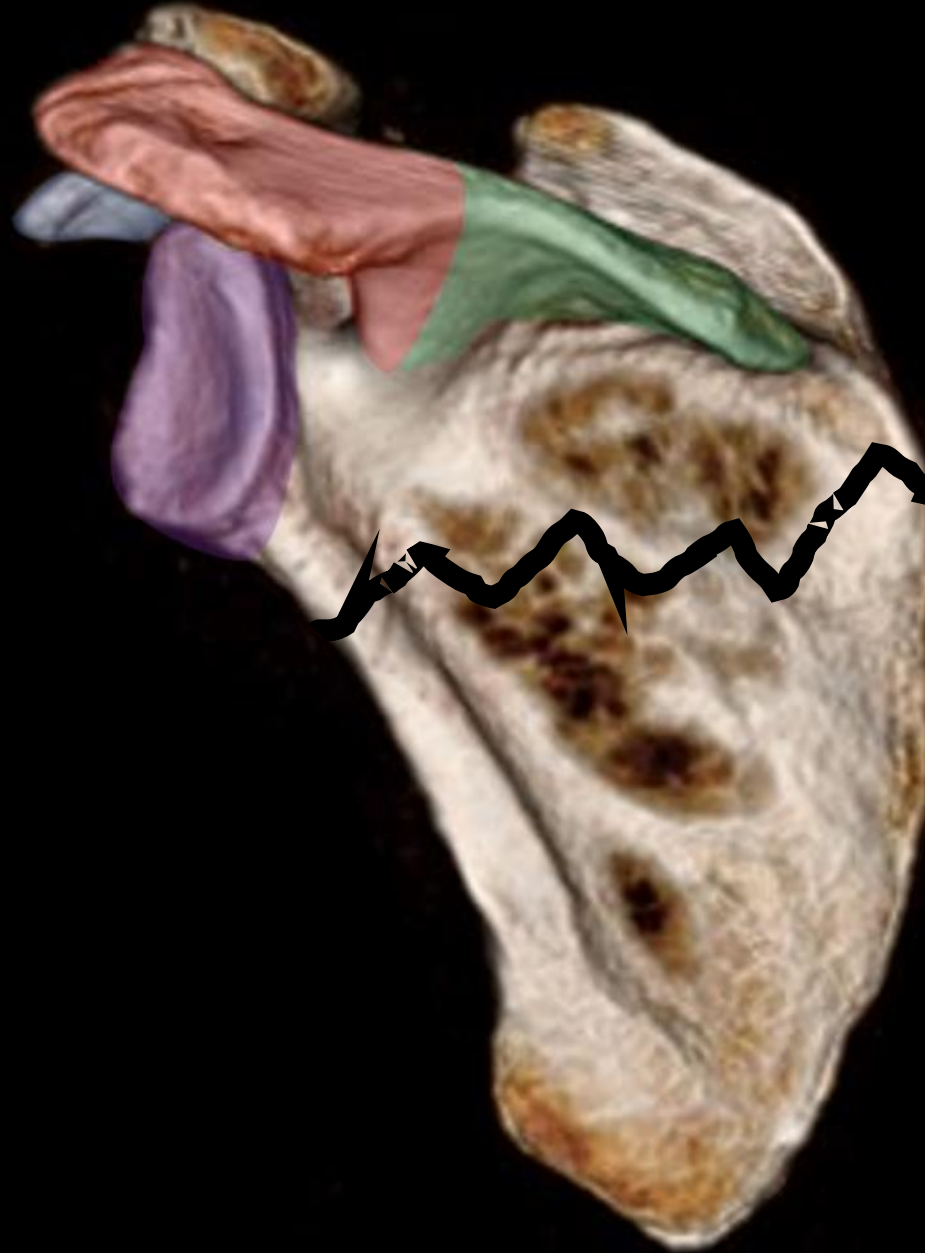
← Surgical neck



Glenoid "neck"

3 Scapular body fractures

Isolated scapular body fxs
don't involve the SSSC at all



- Coracoid
- Acromion
- Glenoid
- Scapular spine*

- Transverse coracoid fracture involving the CC ligament insertion
- Distracted coracoid tip avulsion
- AC separation

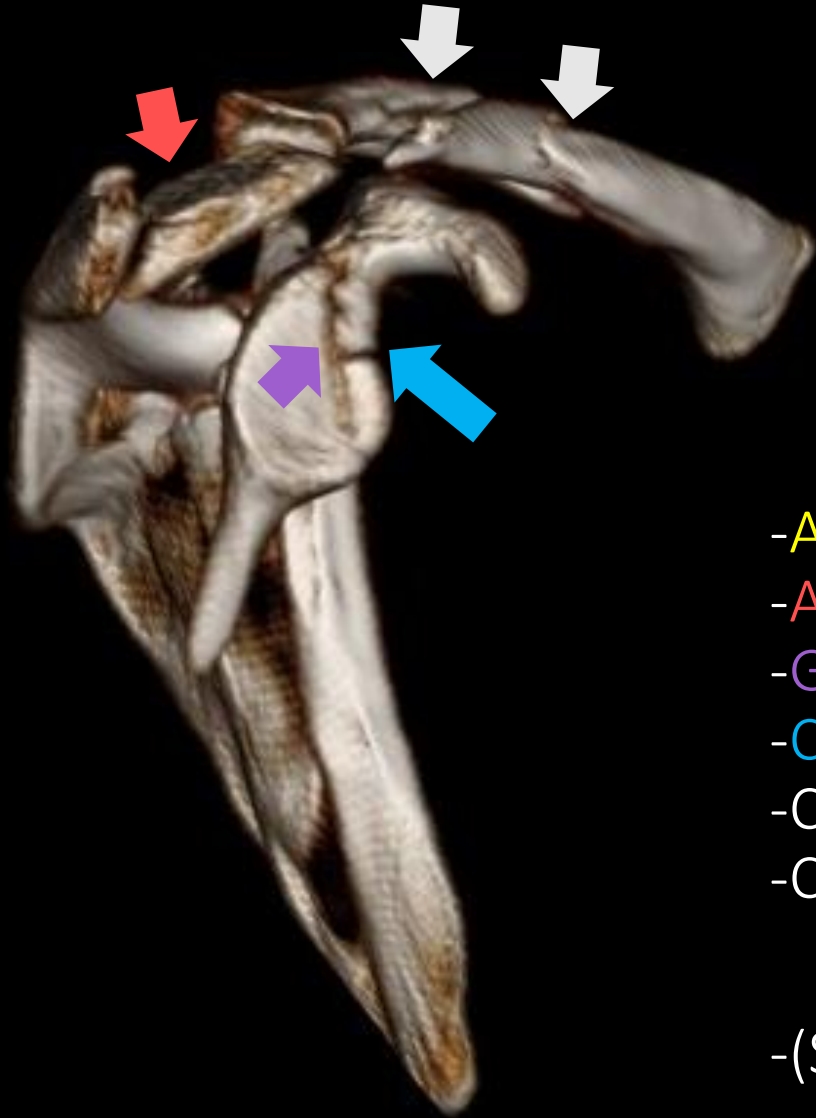


And remember...a good number will look just like this....



Does this scare you?

We've got a **very specific list** of items we want to know about now.
Don't try to take all this in at once.
Let's run the list....



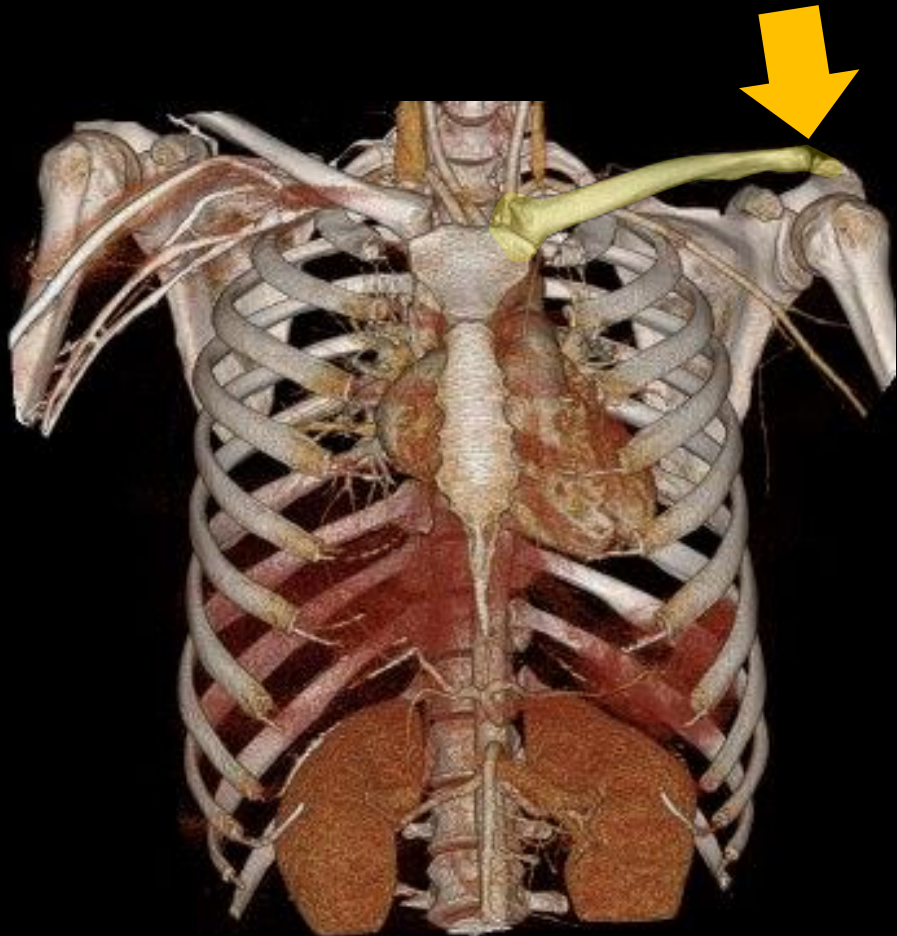
SSSC:

- AC joint
- Acromion
- Glenoid
- Coracoid
- Coracoclavicular ligaments
- Clavicle

- (Scapular body)

Scapulothoracic Dissociation: remember those “joints”?

AC joint (or SC or clavicle)



Scapulothoracic “joint”



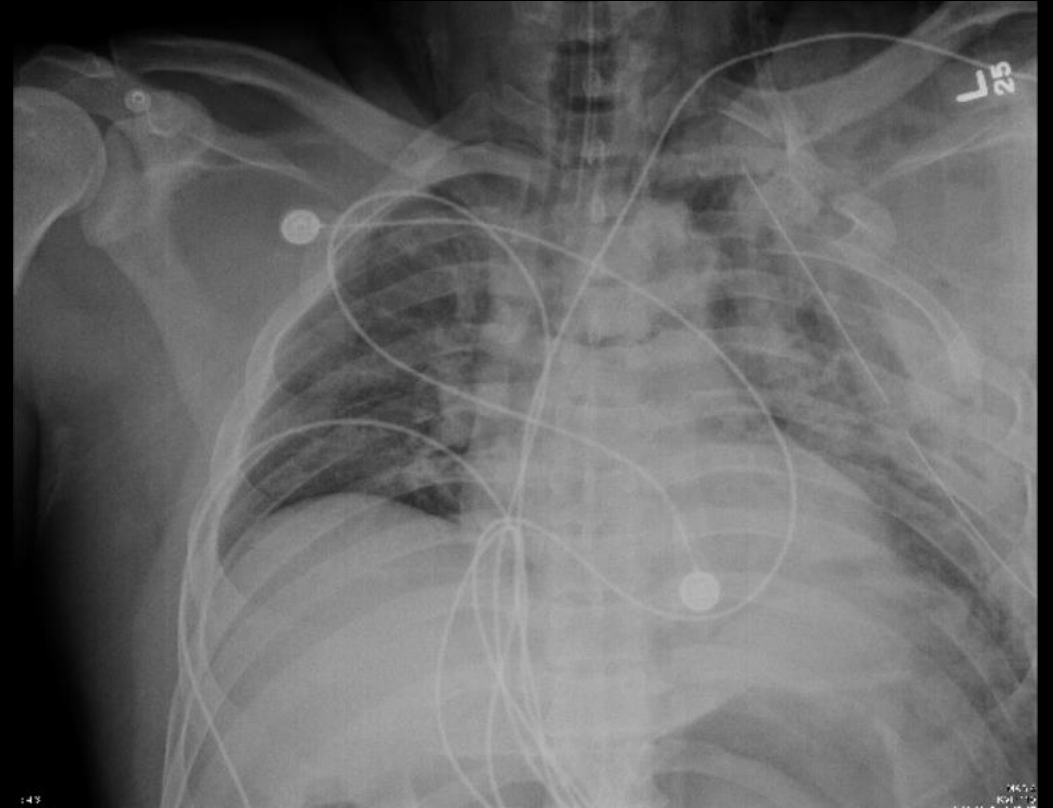
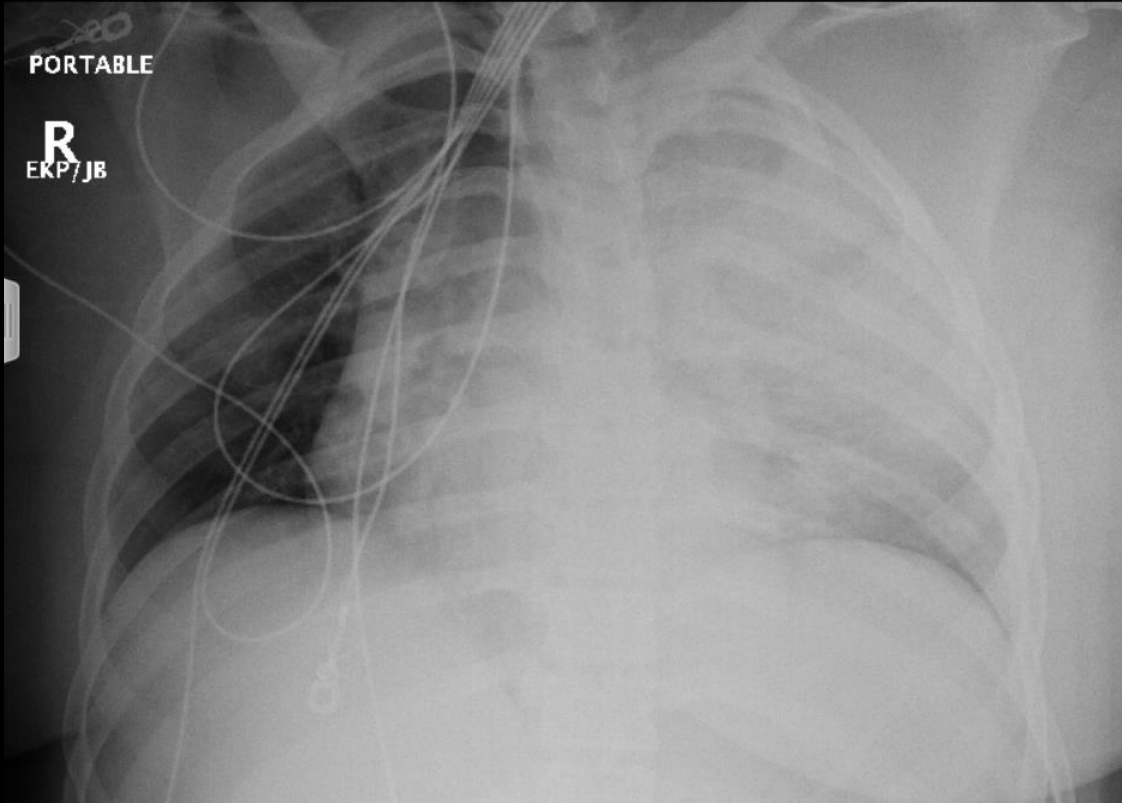
Diagnostic criteria

- AC separation, widely distracted clavicle fracture or sternoclavicular separation ← **RED FLAG**
- Lateral displacement of the scapula on the affected side**



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Diagnostic criteria

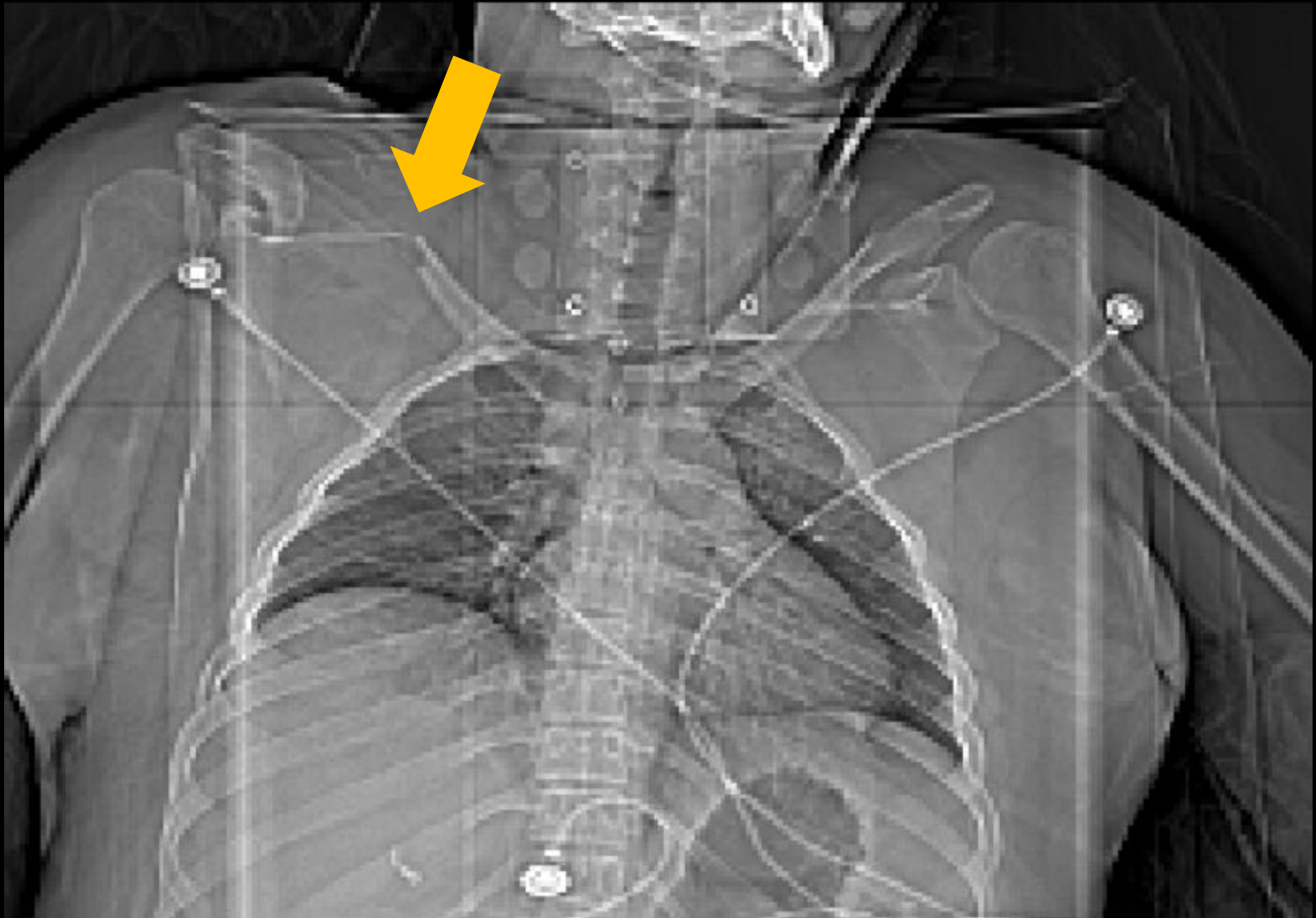
- AC separation, widely distracted clavicle fracture or sternoclavicular separation ← **RED FLAG**
- Lateral displacement of the scapula on the affected side**
- Large axillary hematoma ← **RED FLAG**

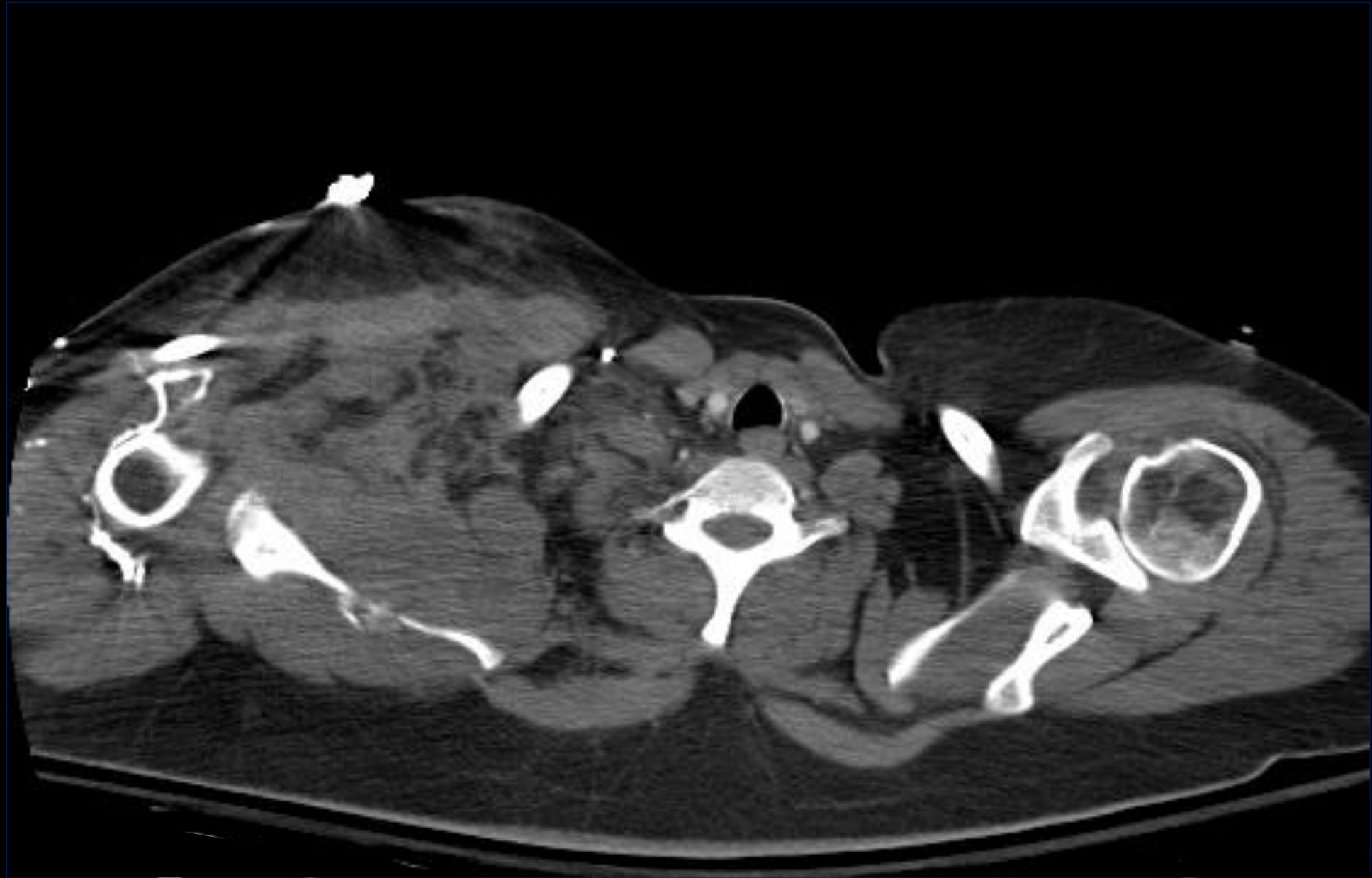
Immediately go looking for:

- Vascular injuries (axillary artery and vein, subclavian)
- Evaluate for neurologic injury (clinical in the acute setting)



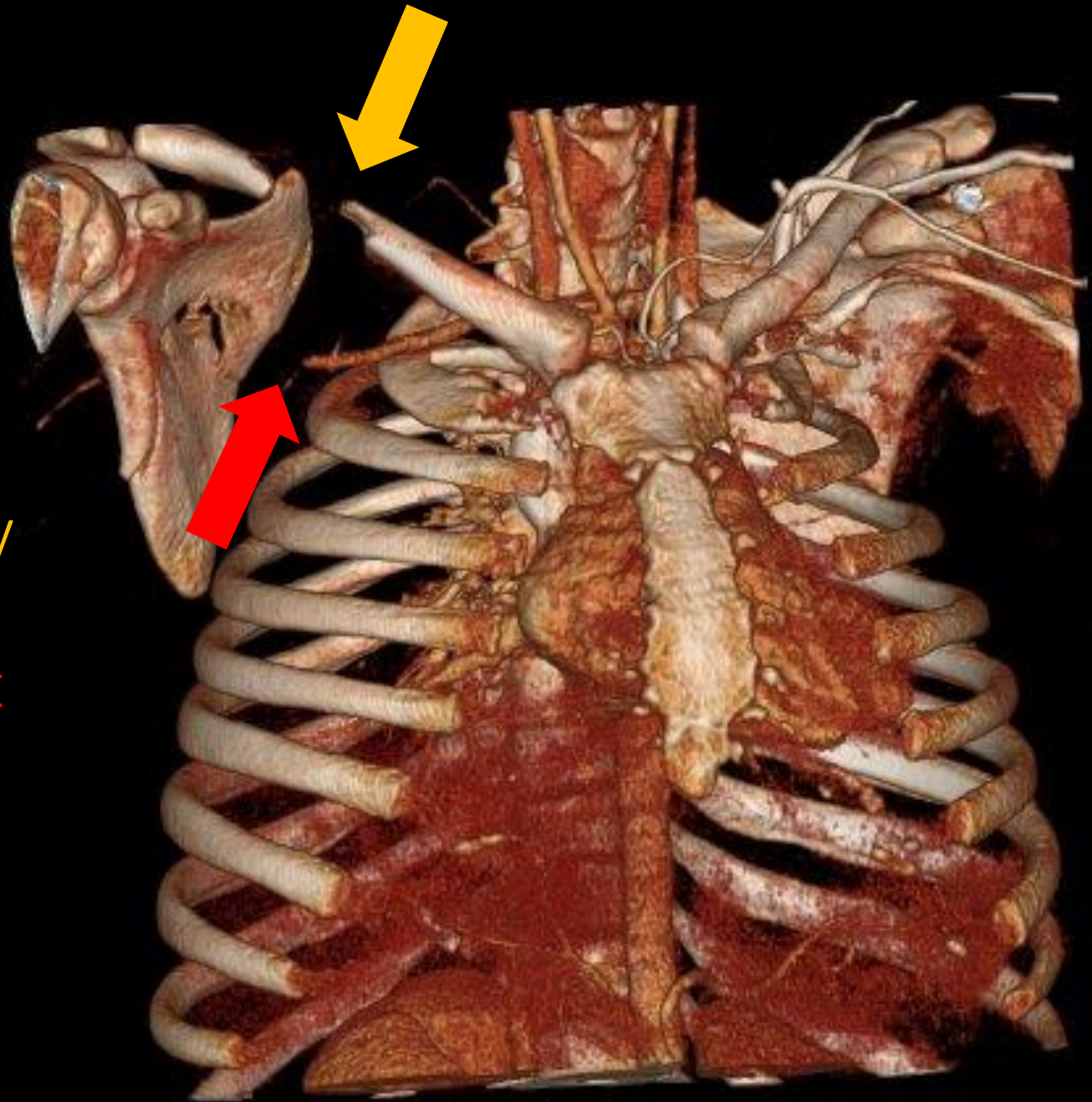




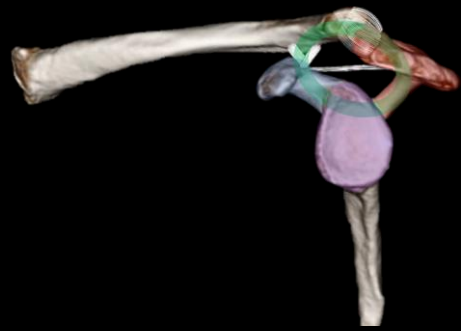


Case courtesy of Dr. Ramesh Chinapuvvula

If you recognize **this injury**
you won't miss the
findings associated with it



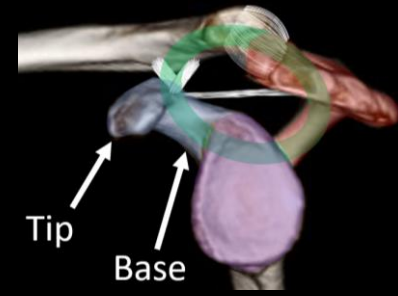
SSSC: it's a checklist!



- AC joint
- Acromion
- Glenoid (+ neck)
- Coracoid
- Coracoclavicular ligaments
- Clavicle

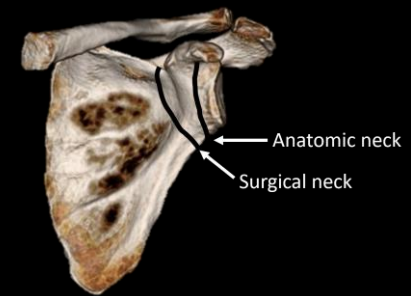
1

Coracoid: Watch the CC ligaments



2

Which glenoid neck was that again?



3

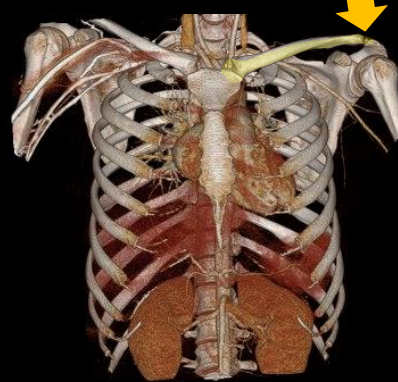
Scapular body fxs don't involve SSSC at all!



Scapulothoracic dissociation

Must involve:

AC/SC/clavicle

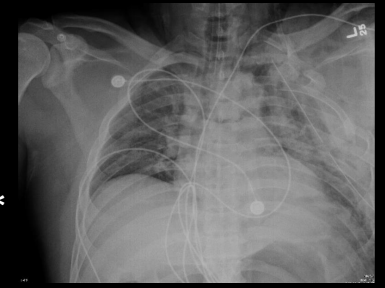


Scapulothoracic "joint"



RED FLAGS

AC/SC/clavicle on initial CXR.
Lateral displacement of the scapula**



Axillary hematoma



Look for:

- Vascular injury
- Neurologic compromise

Thank you!



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