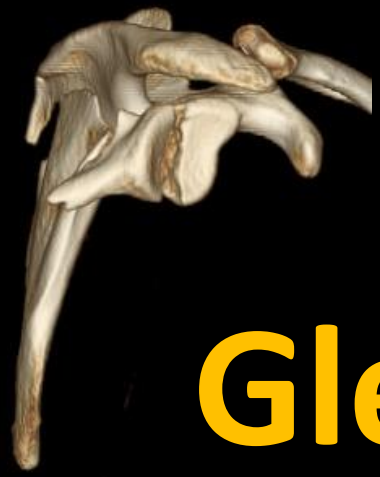
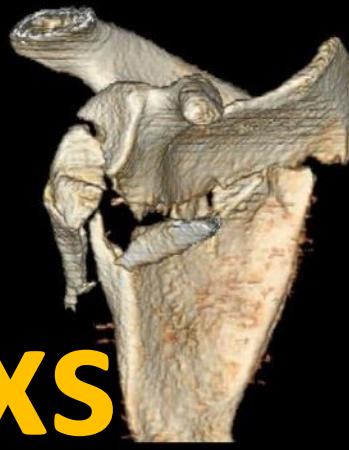
SF Trauma Course 2025





Glenoid & Scapula Fxs

Utku KANDEMIR, MD

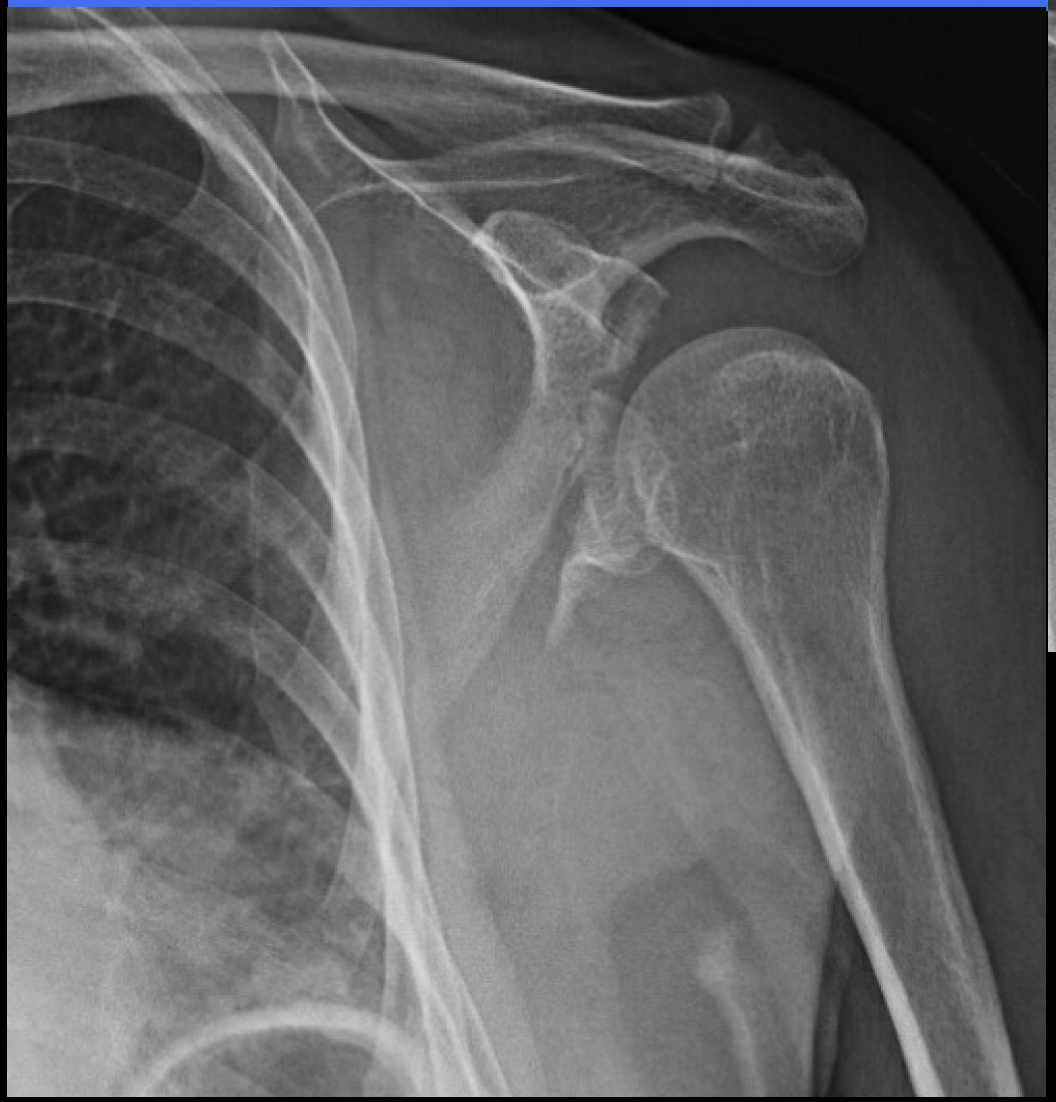
Professor

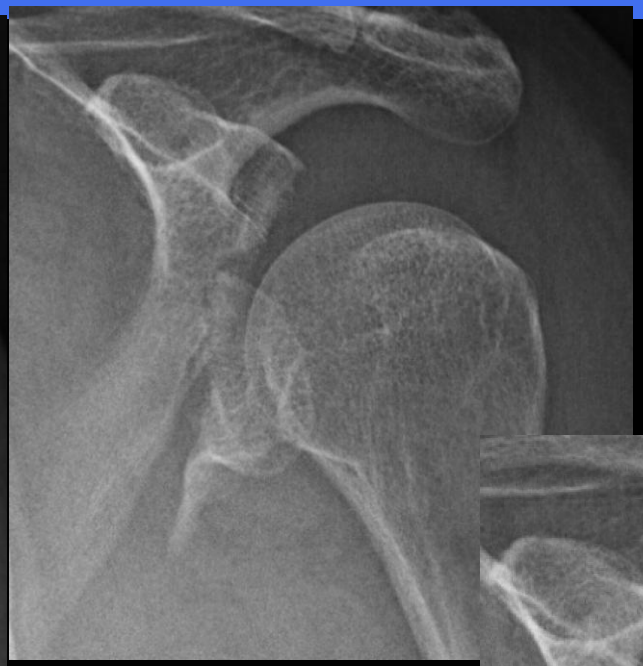
University of California, San Francisco

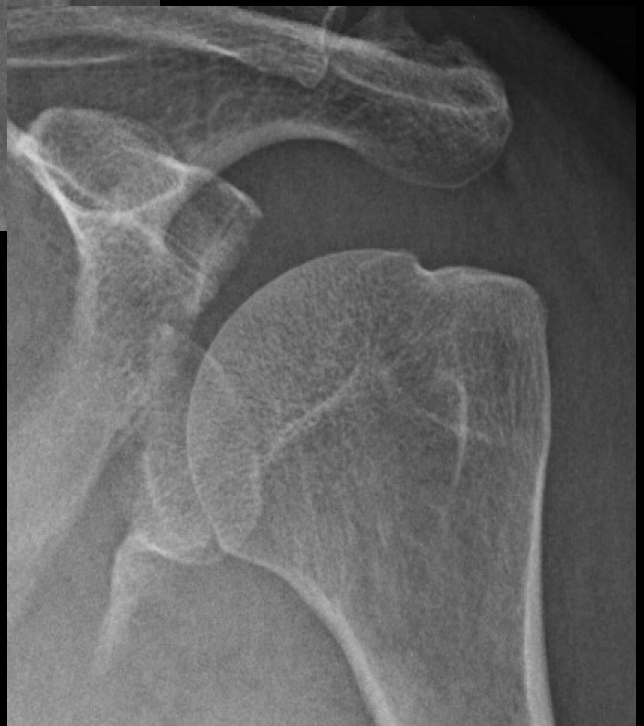
Orthopaedic Trauma Institute

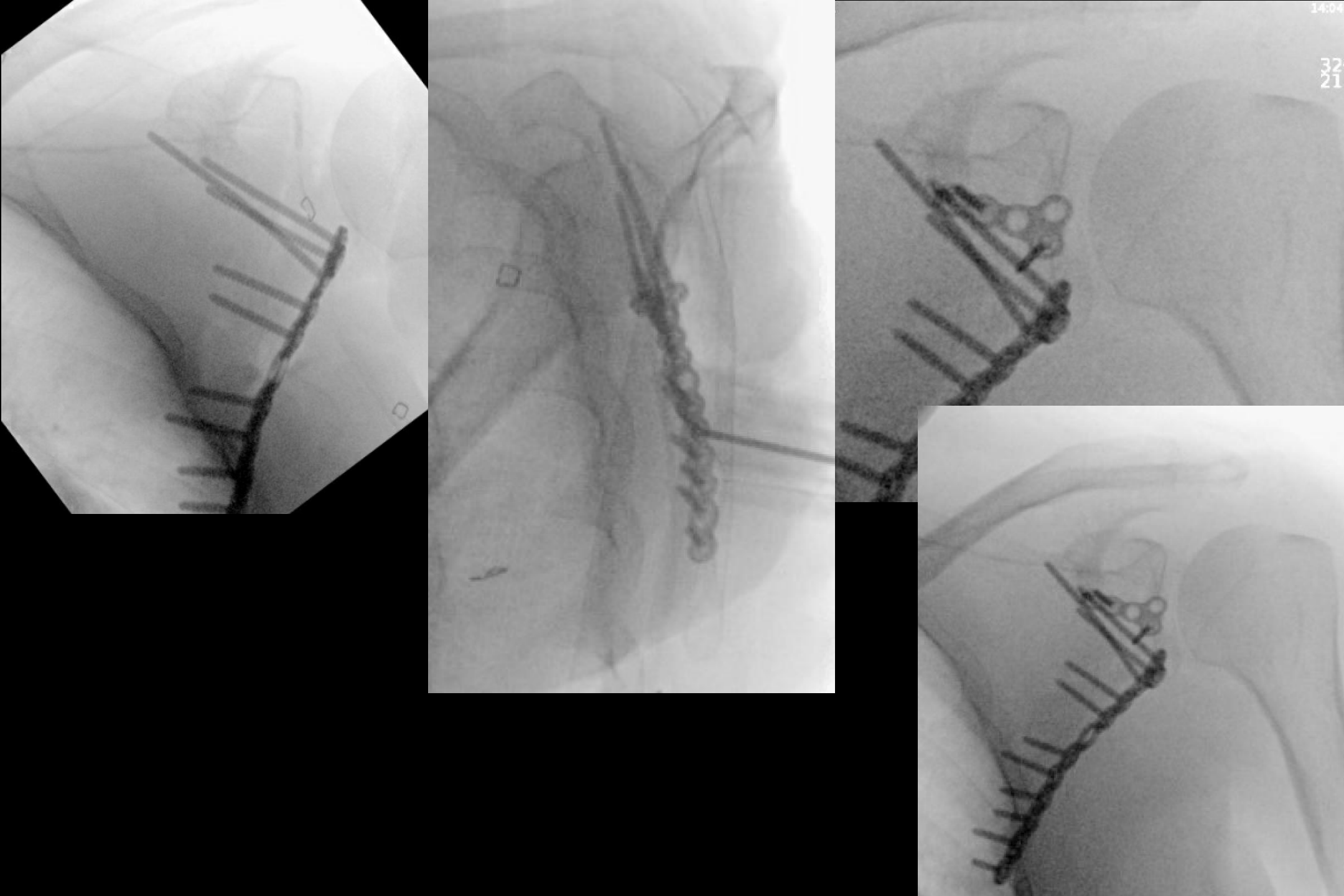
UCSF + SAN FRANCISCO GENERAL HOSPITAL

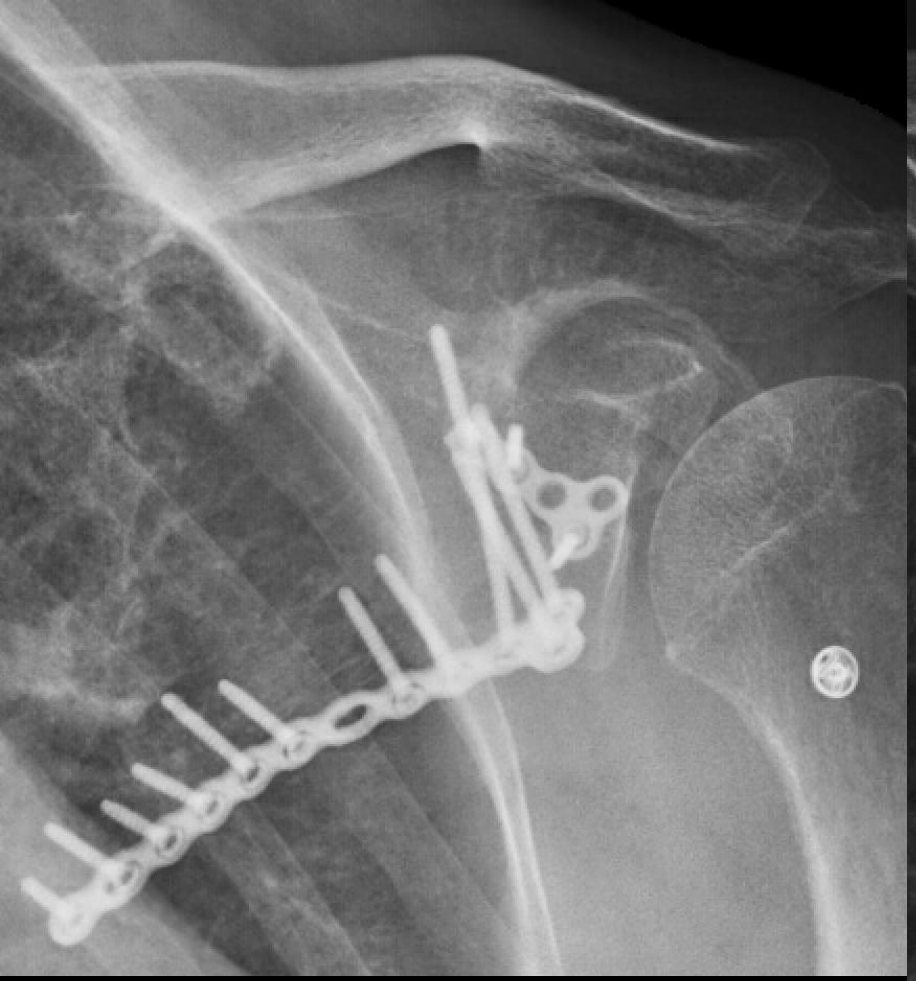
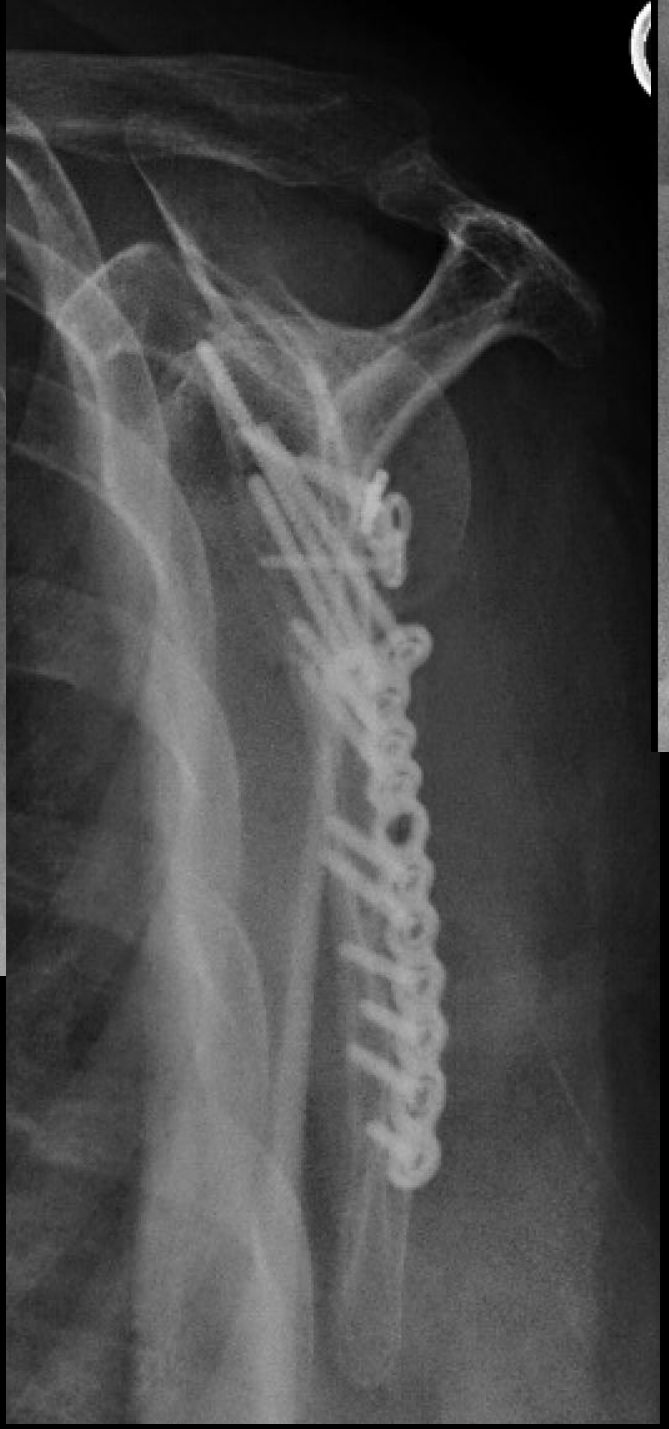
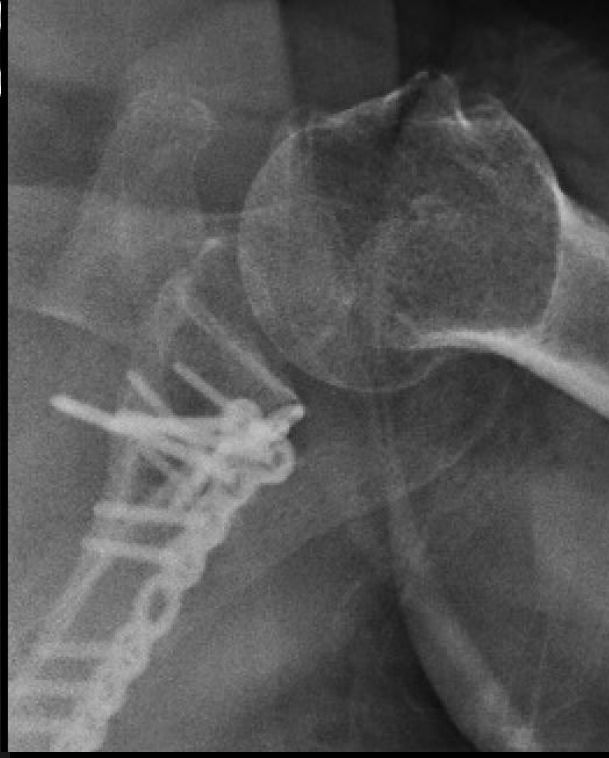
90126130

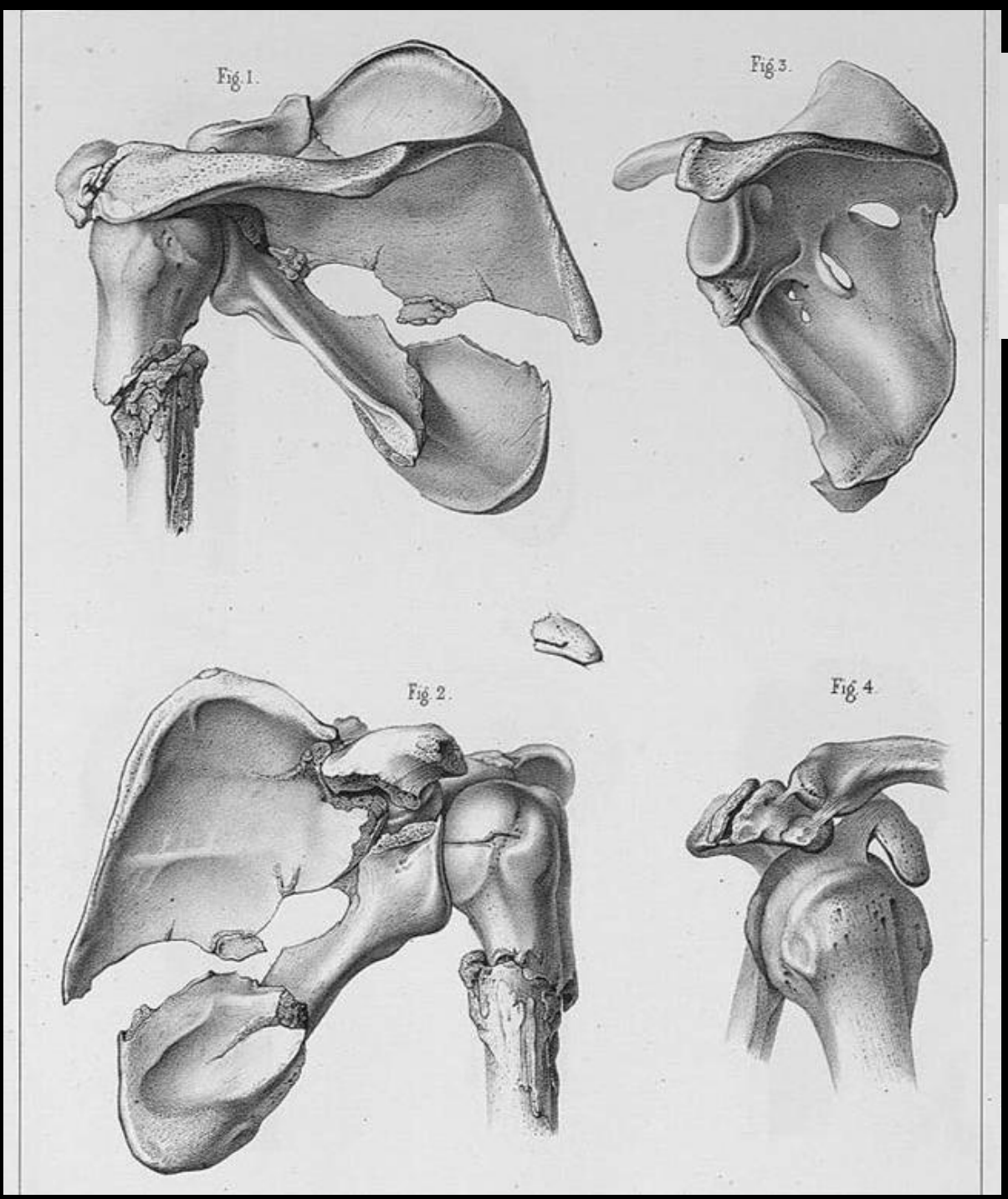










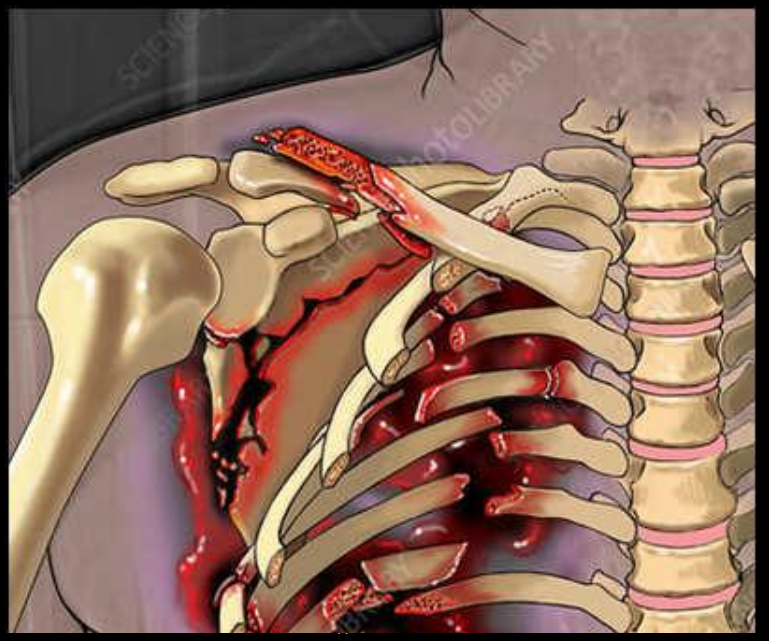
FRACTURES.

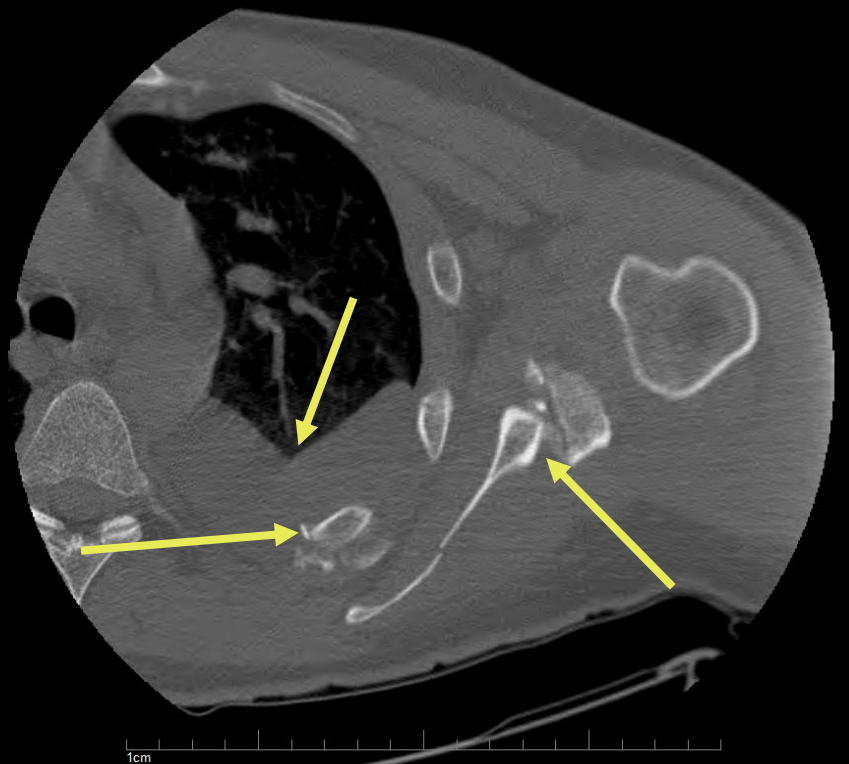
Fractures de l'Omoplate et du Col de l'Humérus.

Malgaigne. Fractures. 1855

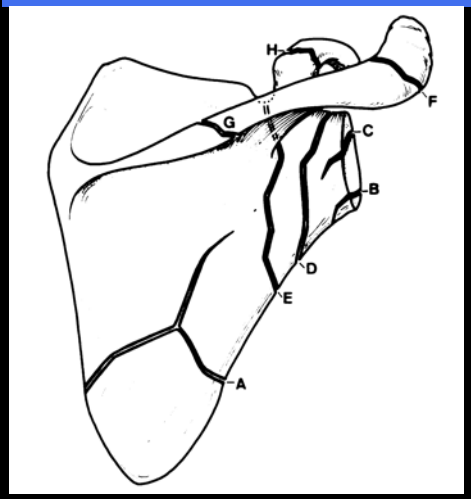
Associated Injuries

- 95%: High energy!
  - Ribs, clavicle, Hemo/Pneumothorax
- 50 % ipsilateral extremity
- 15% C-spine
- 15% TBI

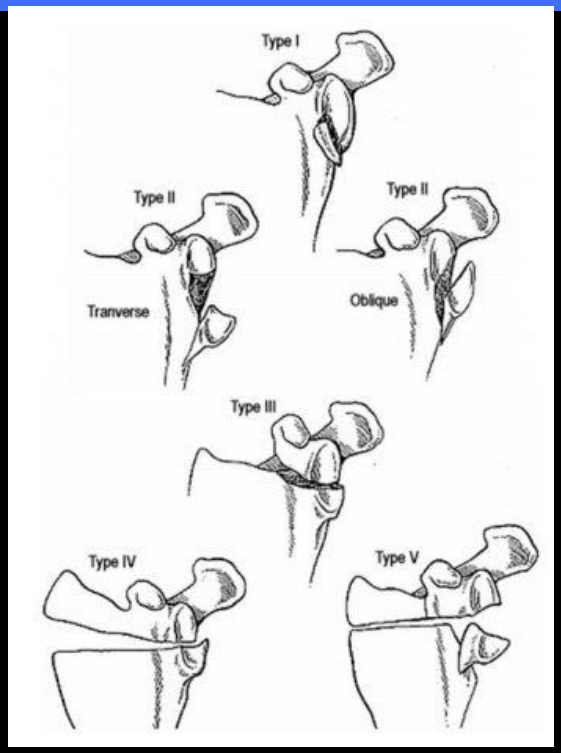




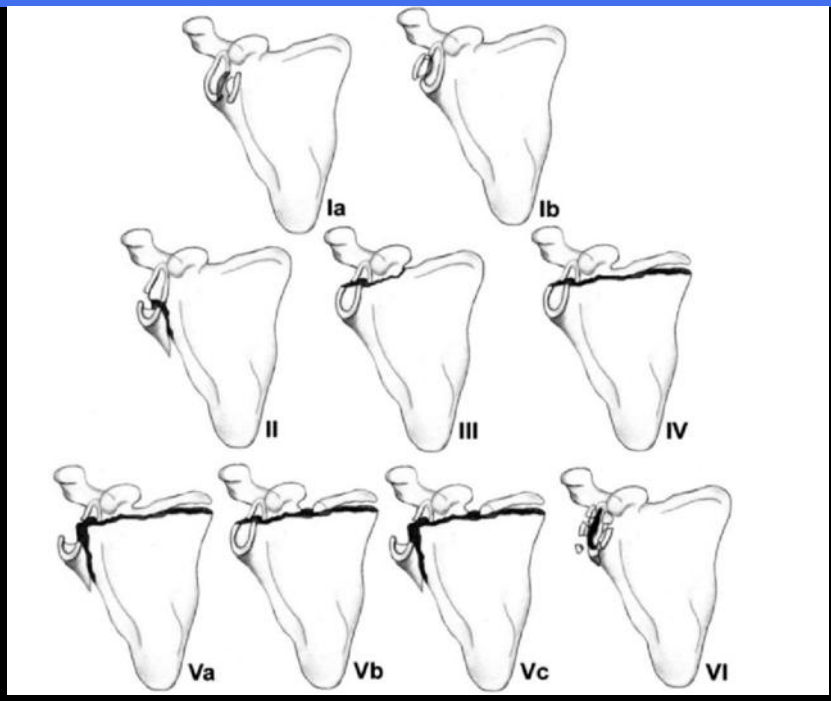
Scapula Fractures



Hardegger

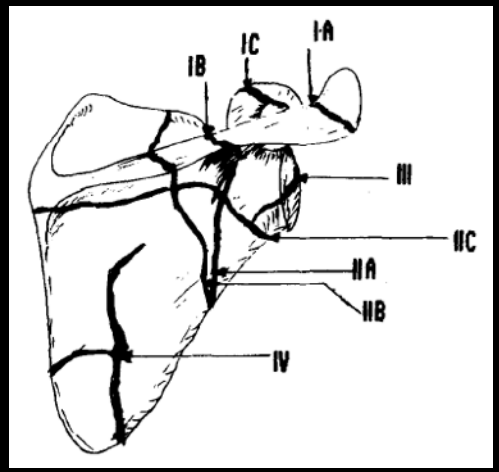


Ideberg



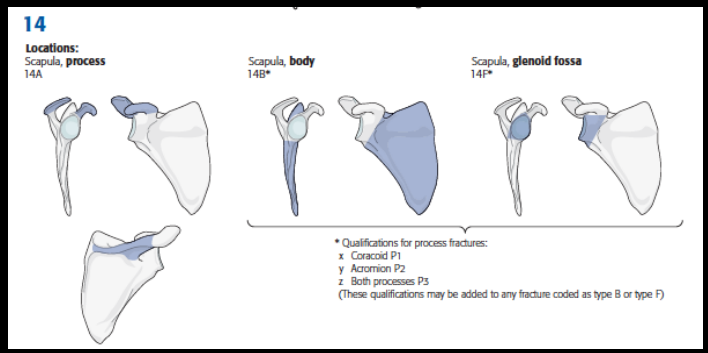
Goss

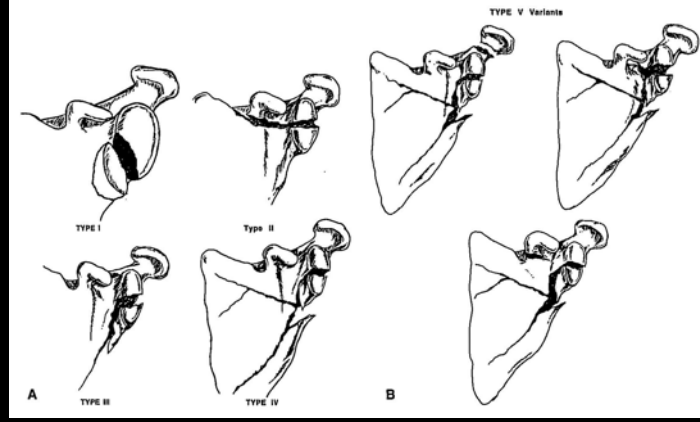
Mayo



Ada & Miller

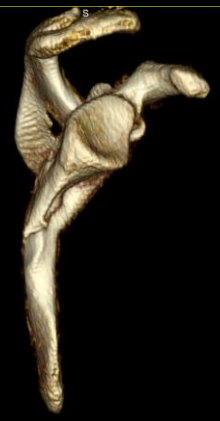
AO/OTA





Indications

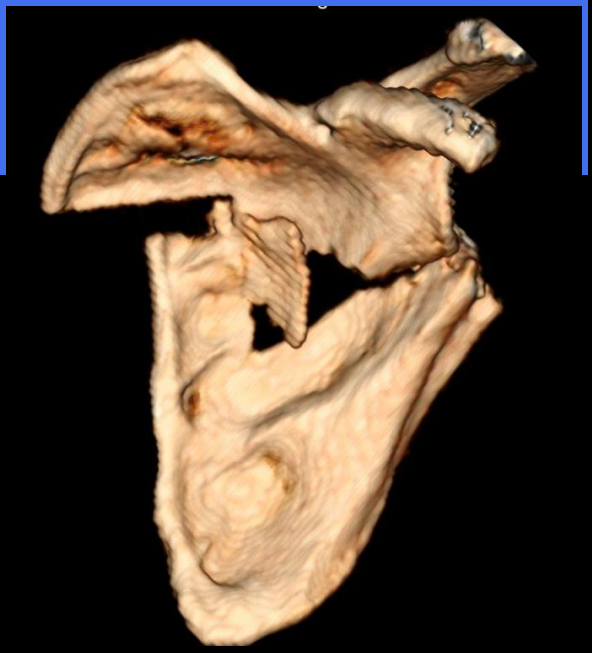
- GLENOID:
  - Instability
  - Articular step-off >3-4mm
  - Glenopolar angle <22°
- BODY:
  - Lateral Border Offset >2cm
  - Body Angulation >45°
  - Clavicle & Scapula Displacement >1cm



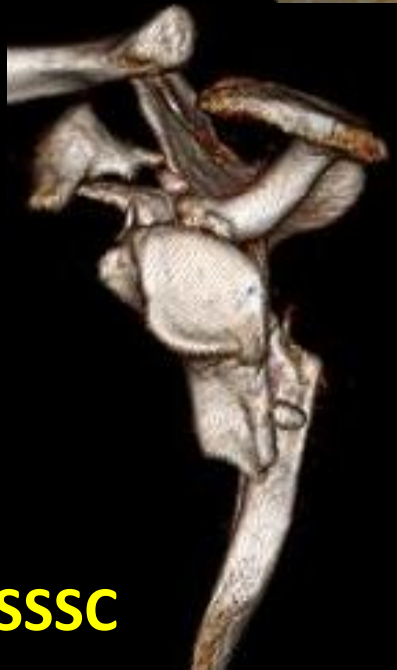
Deformity

Instability

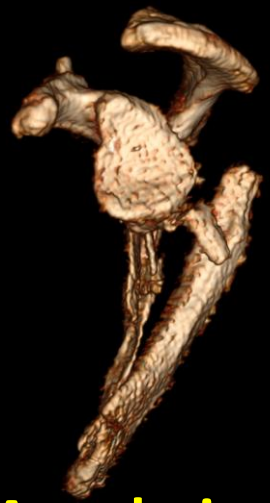
Articular step-off



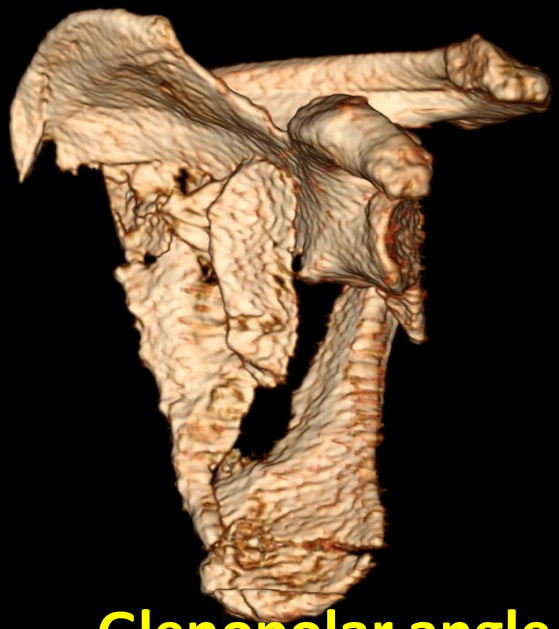
Medialization



SSSC

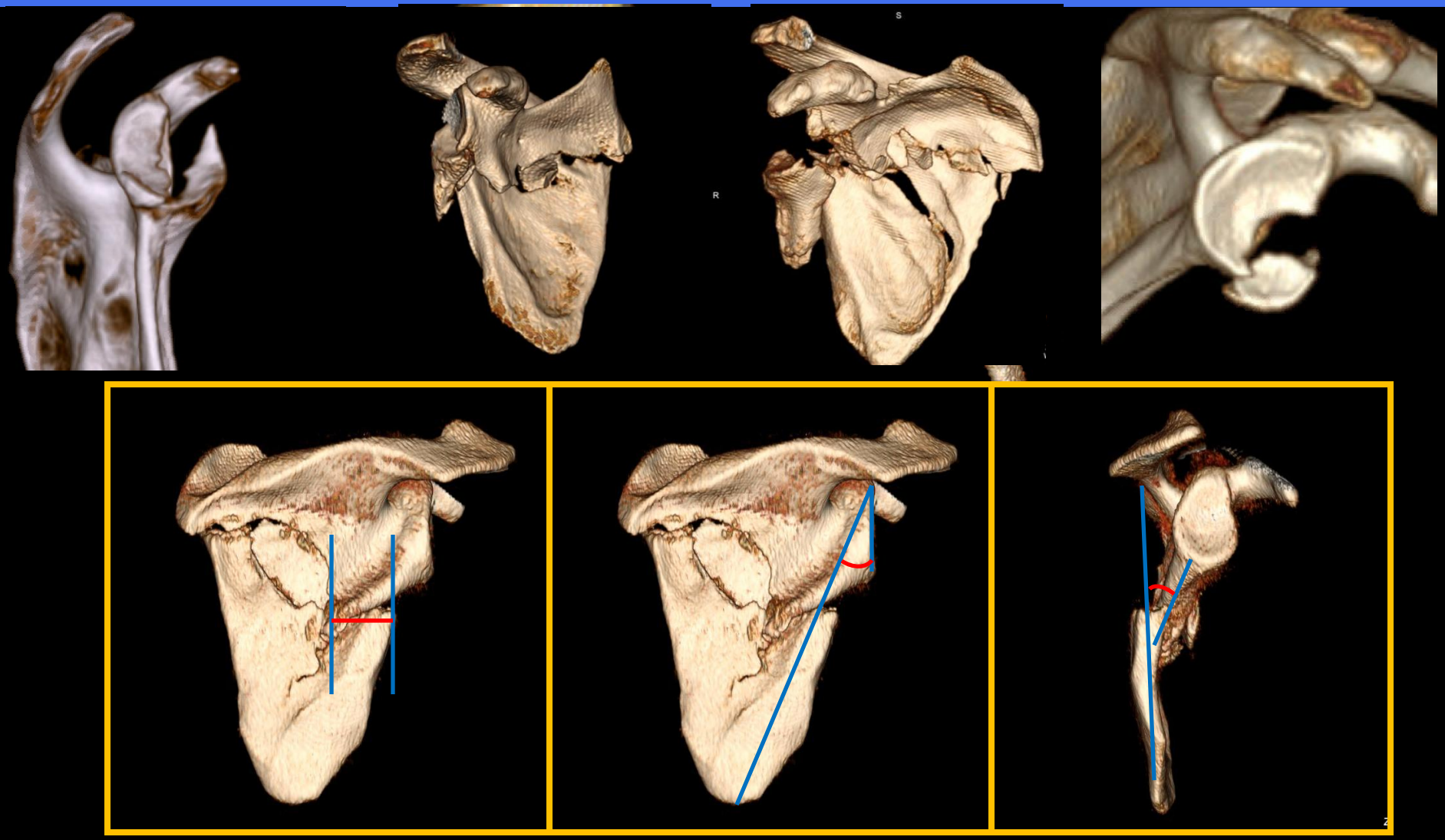


Angulation



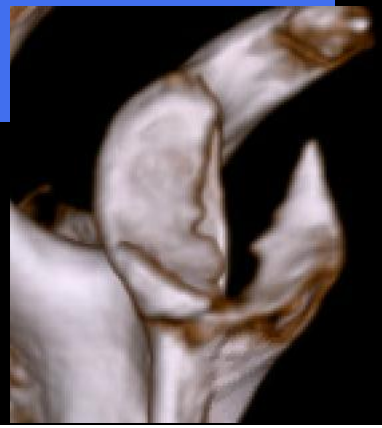
Glenopolar angle

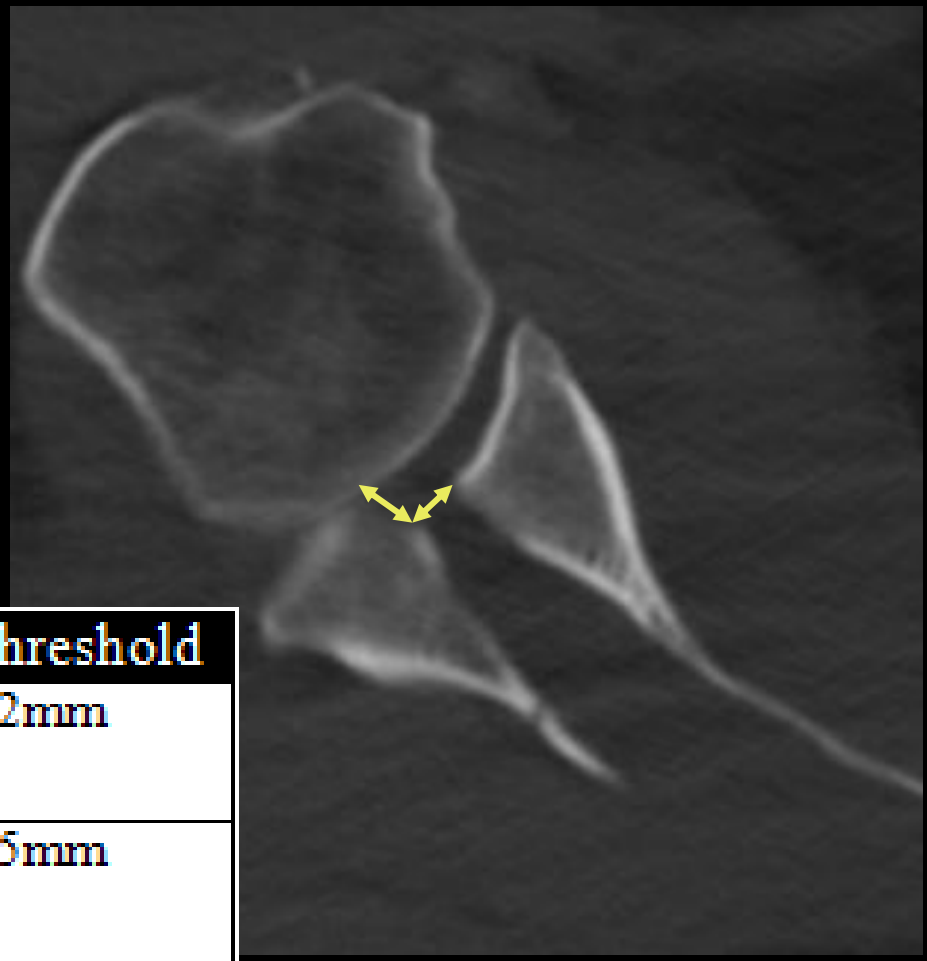
Evaluation: CT w 3D recons



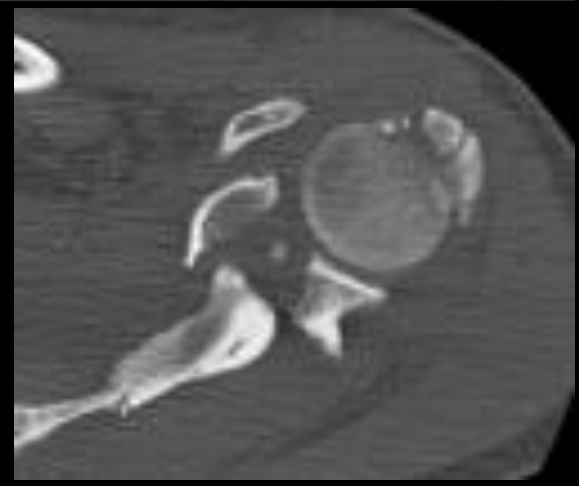
Articular

- Step-off
- Gap

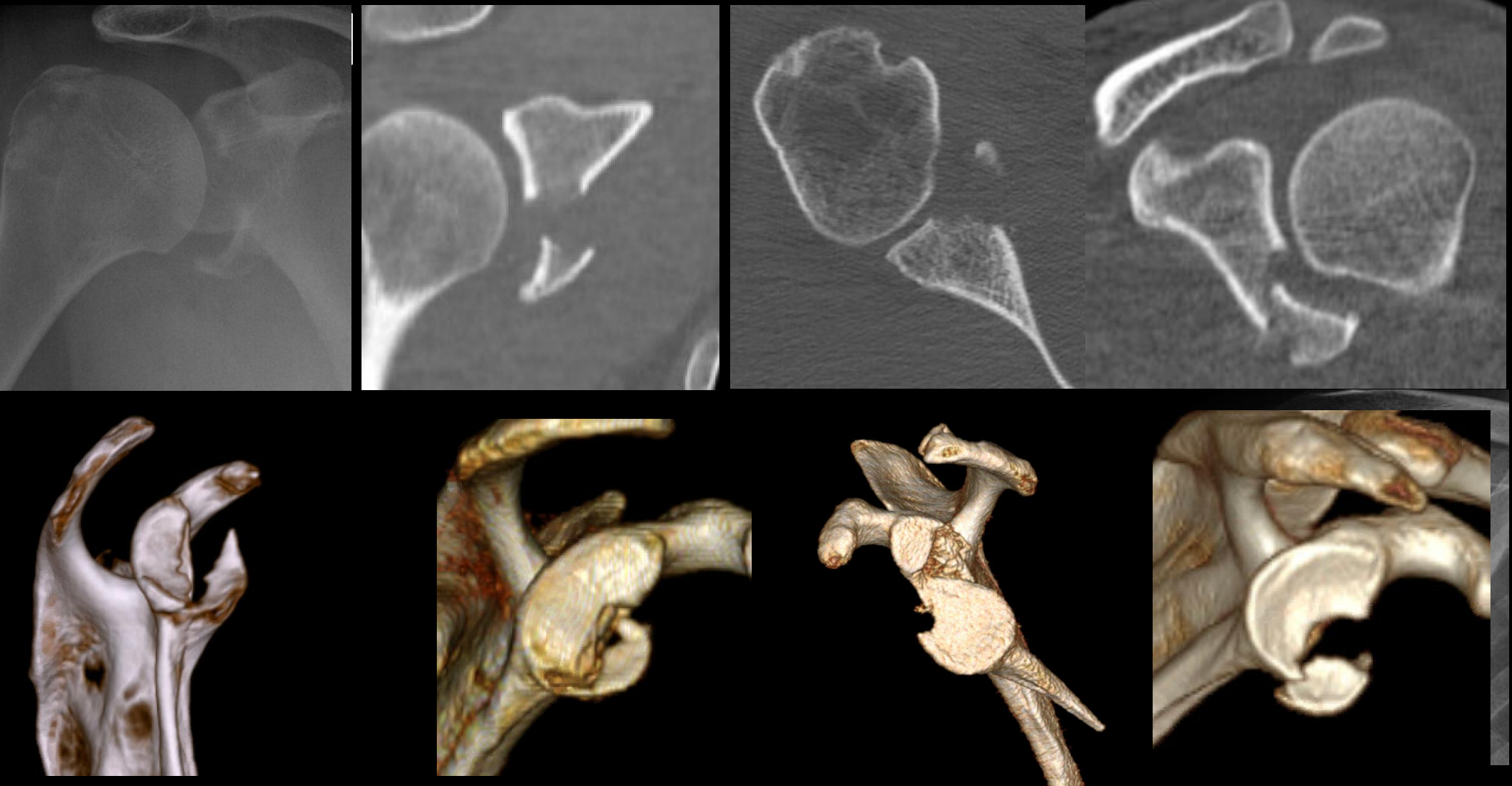




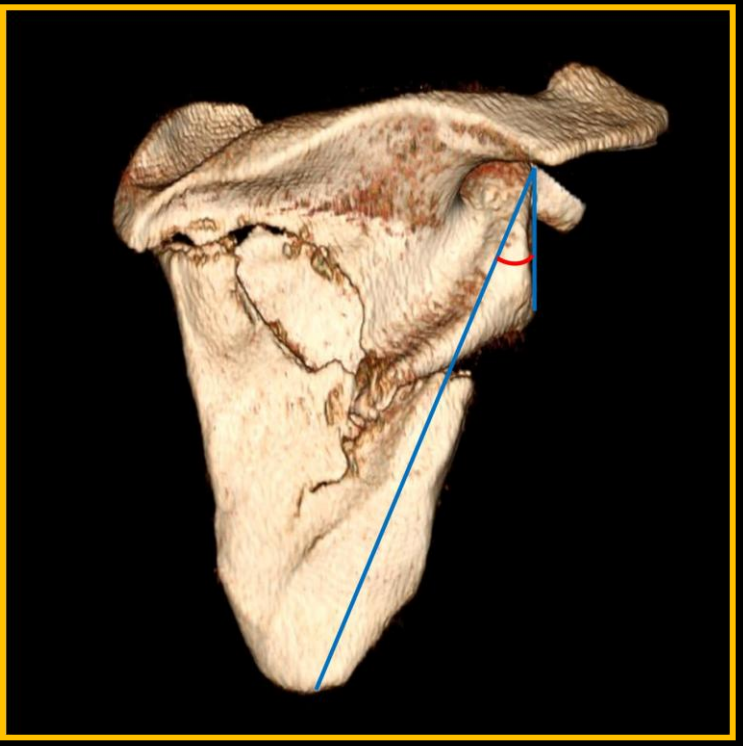
Operative Indications based on Displacement		Threshold
Articular StepOff/Gap	Kavanagh BF, et al. (1993)	> 2mm
	Mayo KA, et al. (1998)	> 5mm
	Herrera DA, et al (2009)	≥ 4mm
	Jones CB, et al (2009)	>3mm
	Jones CB, et al (2011)	>3mm
	Anavian J, et al (2012)	≥ 4mm

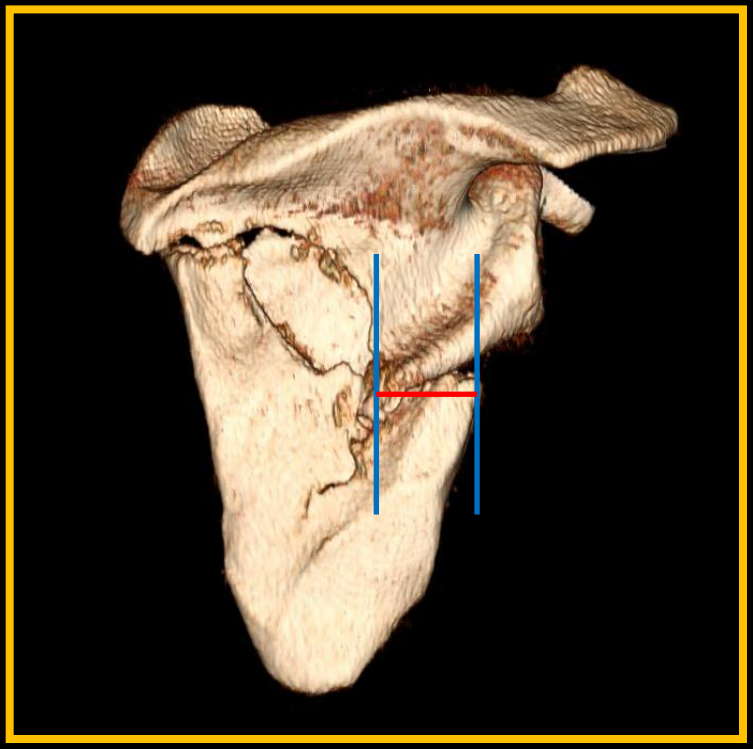


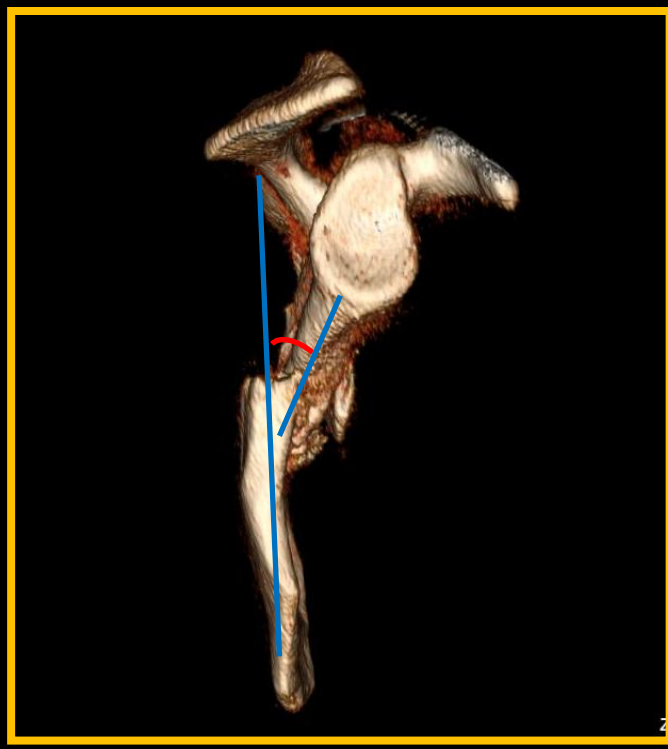
Articular: Instability



Glenopolar angle
Lateral border offset
Body Angulation





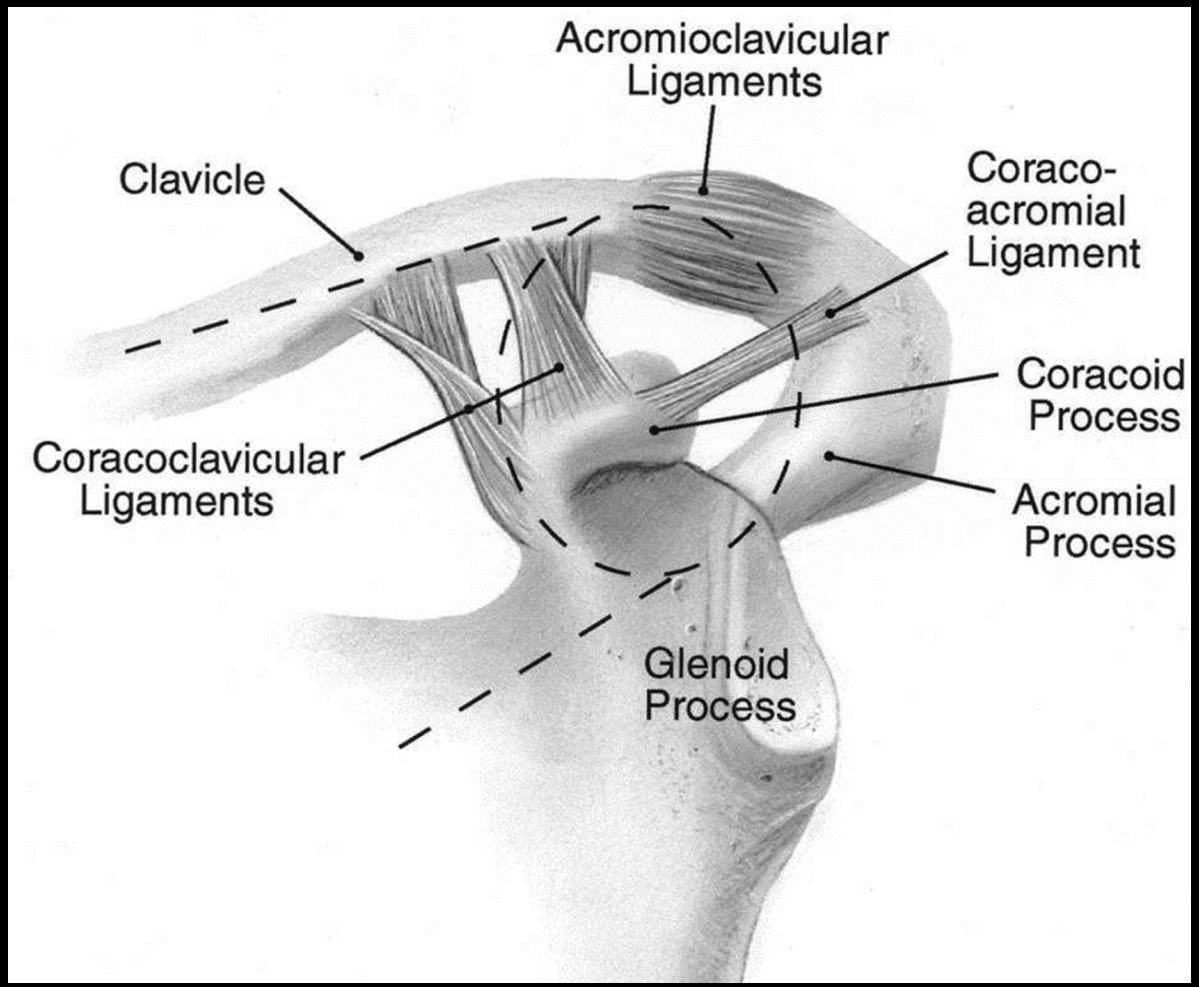


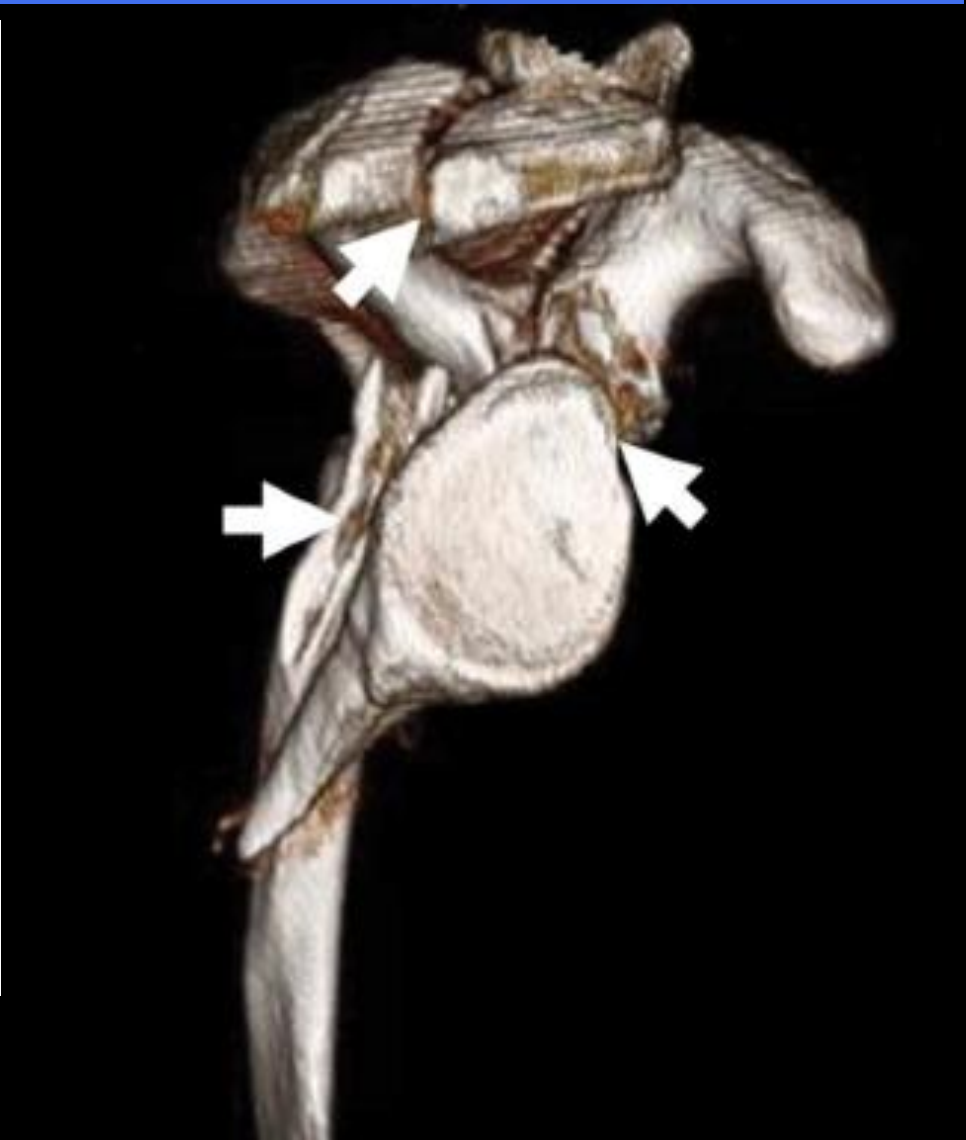
<22°

<2cm

>45°

Superior Shoulder Suspensory Complex: "Floating Shoulder"

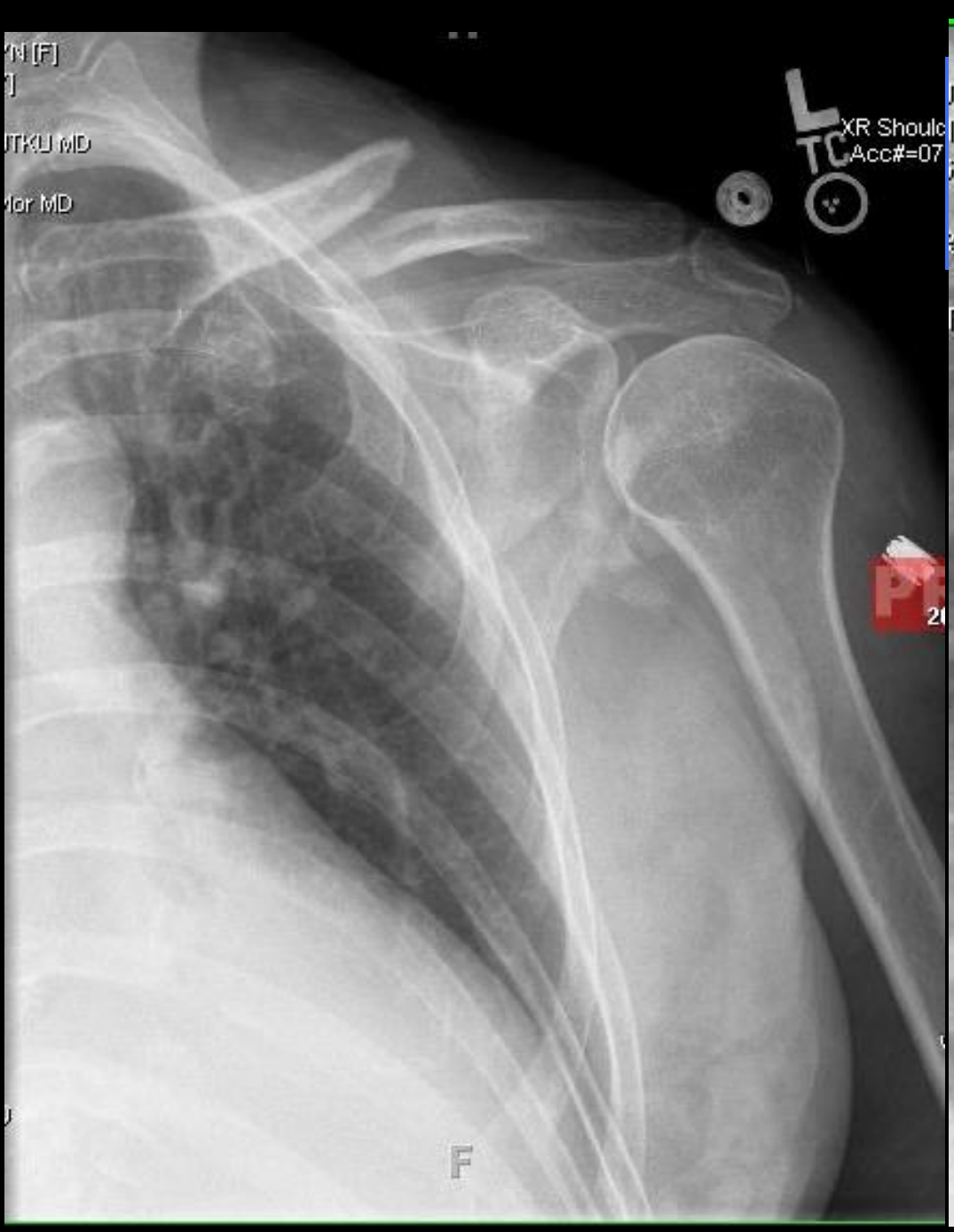


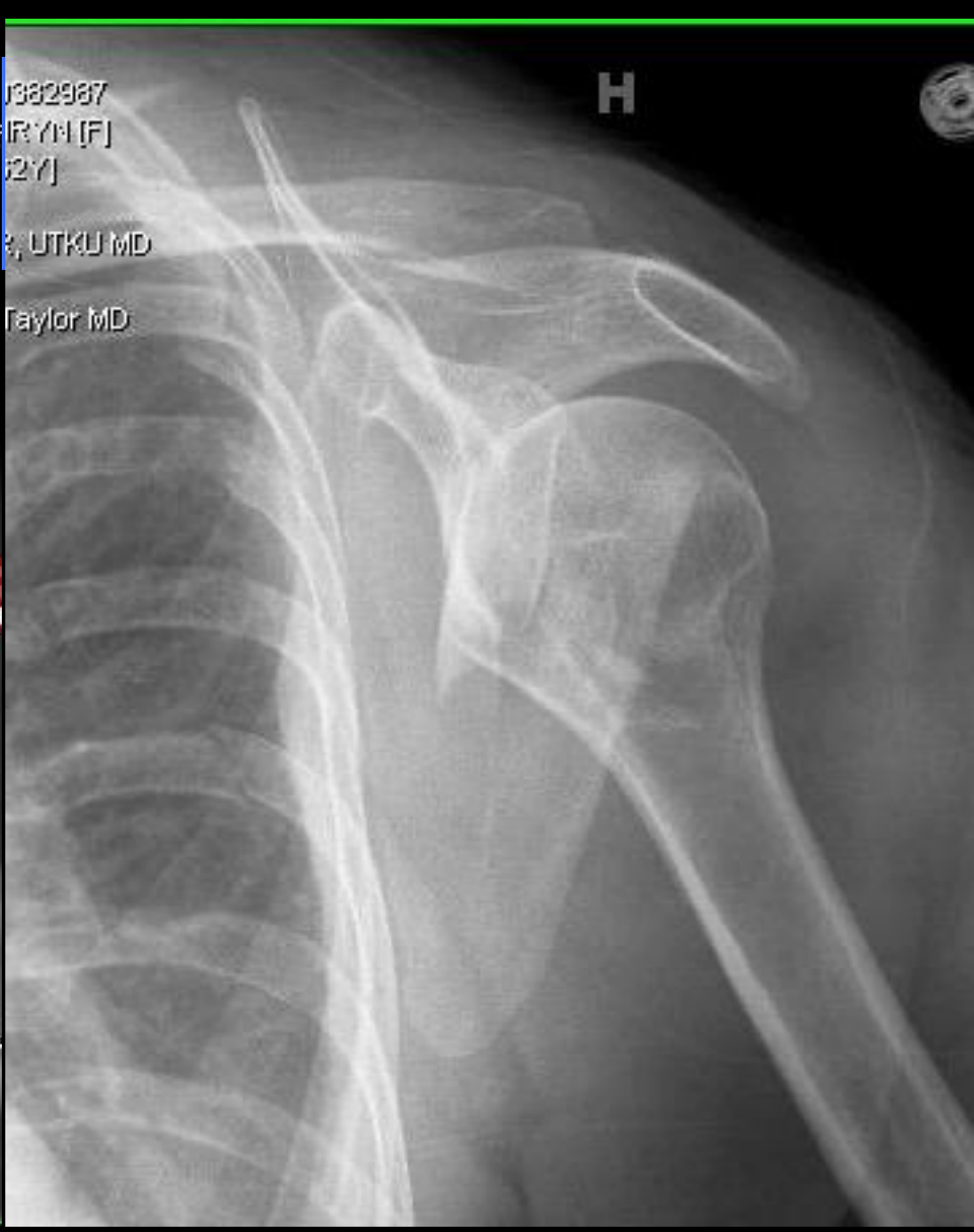


Posterior Approach

KB

- 62 y/o female, RHD
- s/p MVA
- Pelvis fracture
- Left shoulder fracture dislocation - reduced
- Referred 3 weeks postinjury


L
XR Shoulc
Acc#=07
F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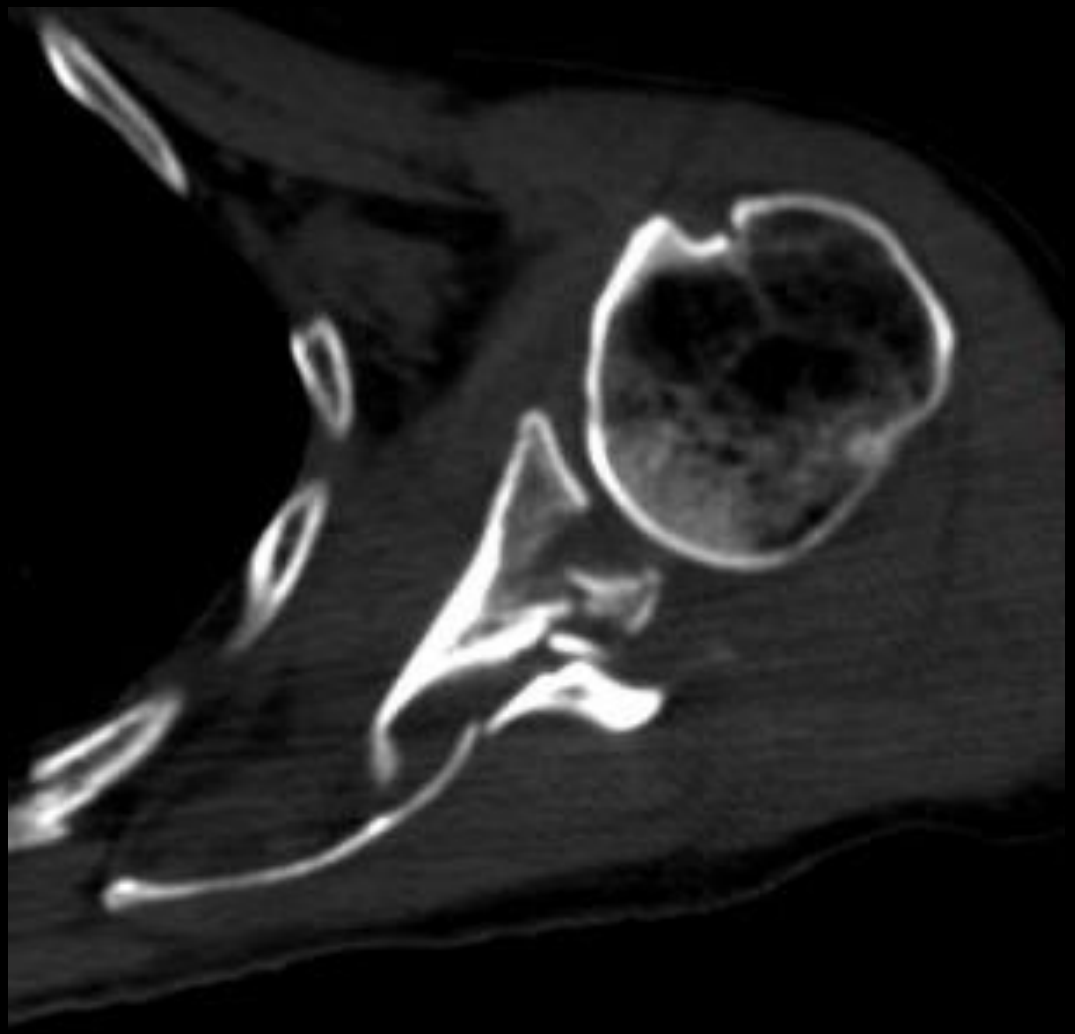
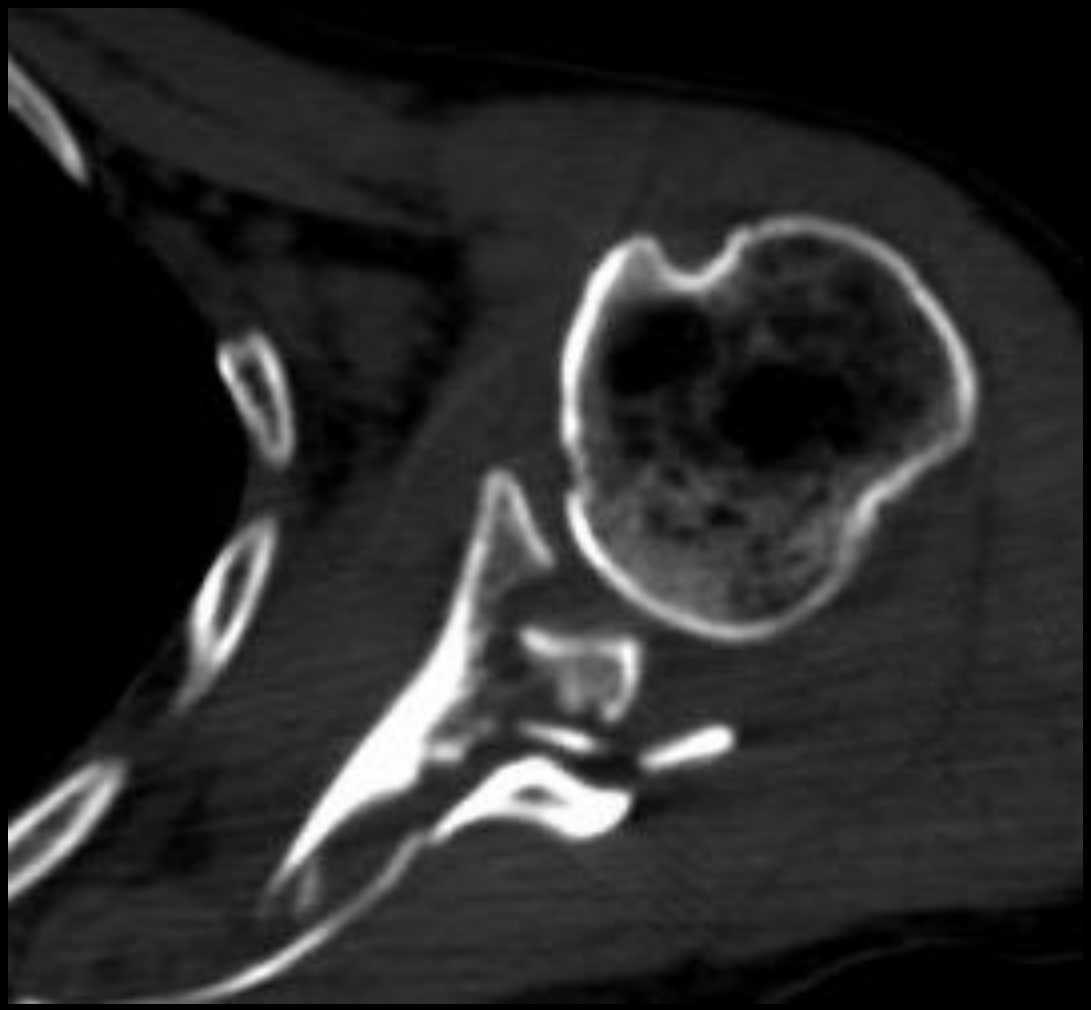
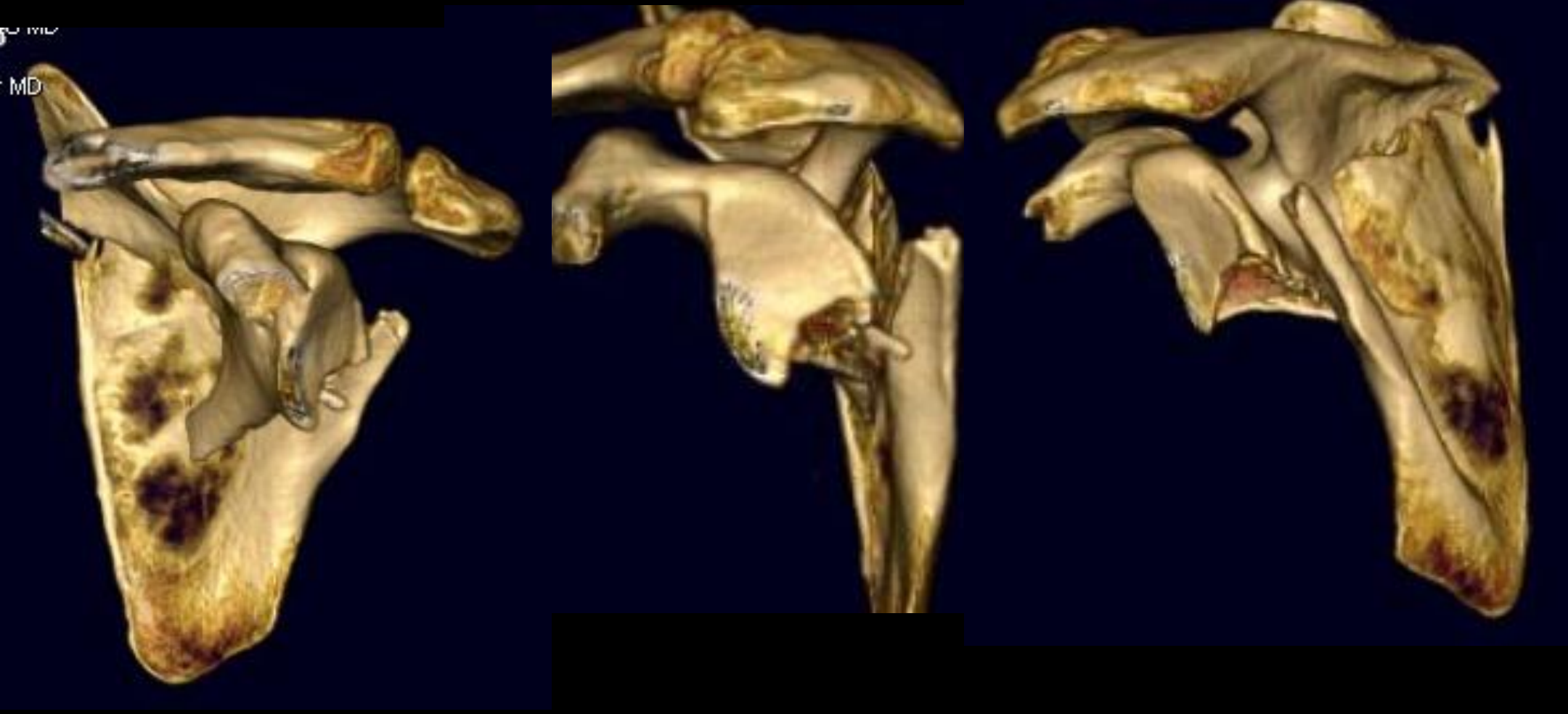
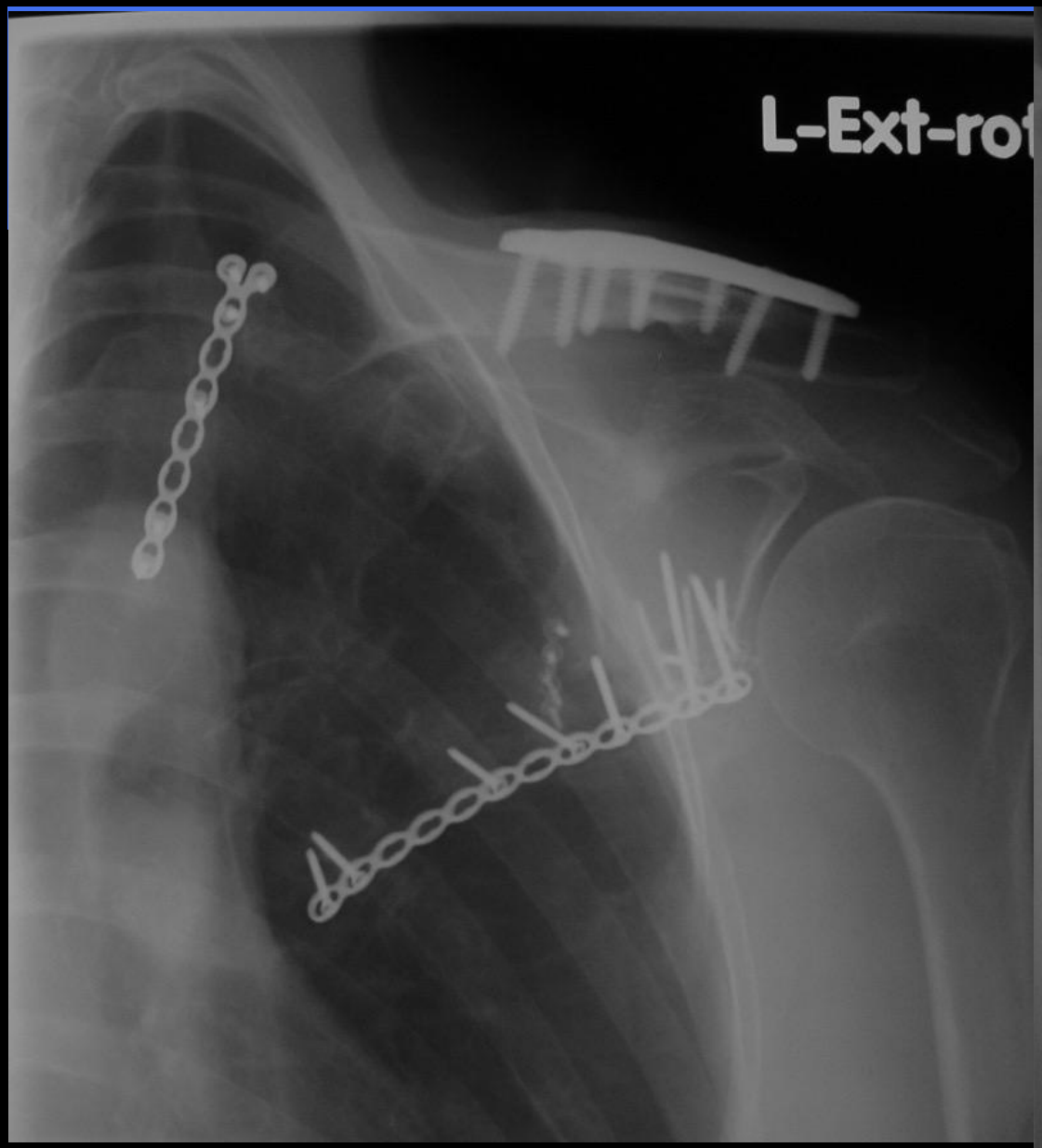
IR:YN [F]
, UTKU MD
Taylor MD

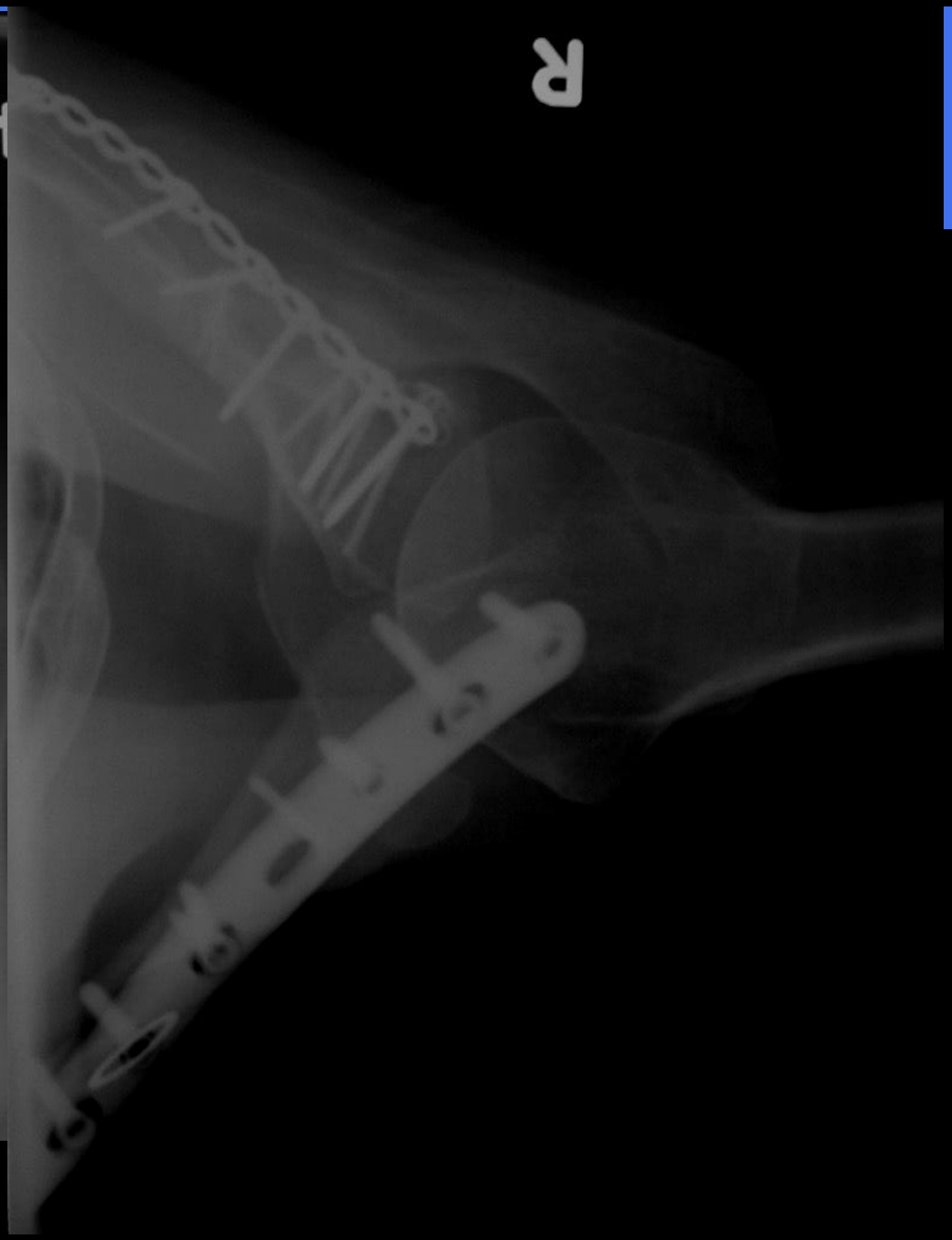
62 yo



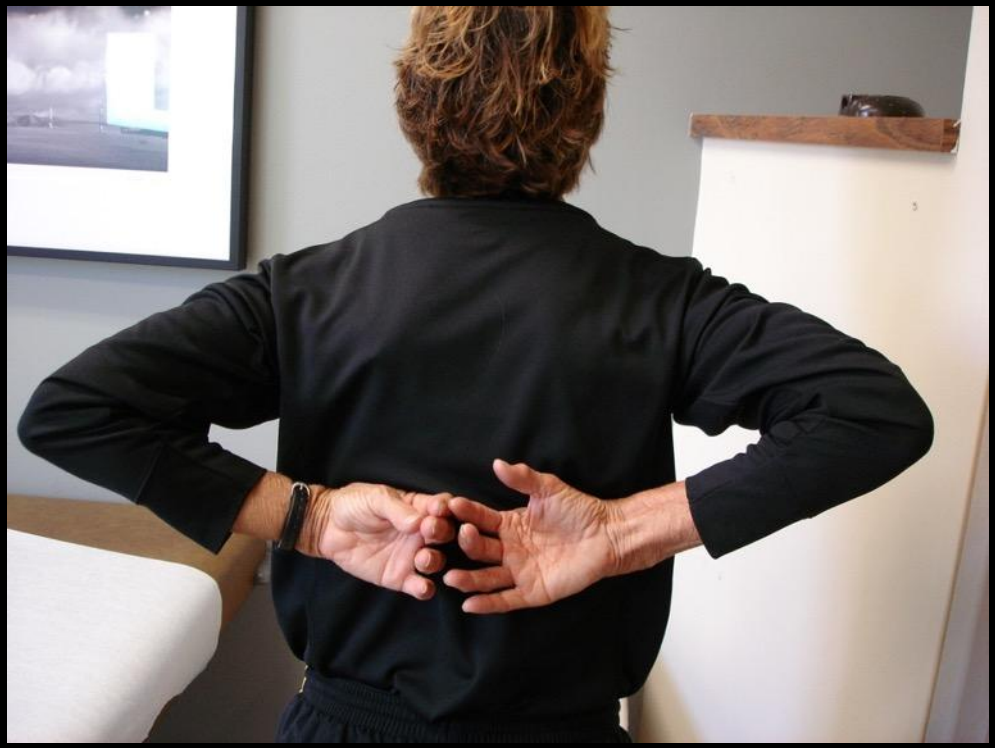





L-Ext-rot

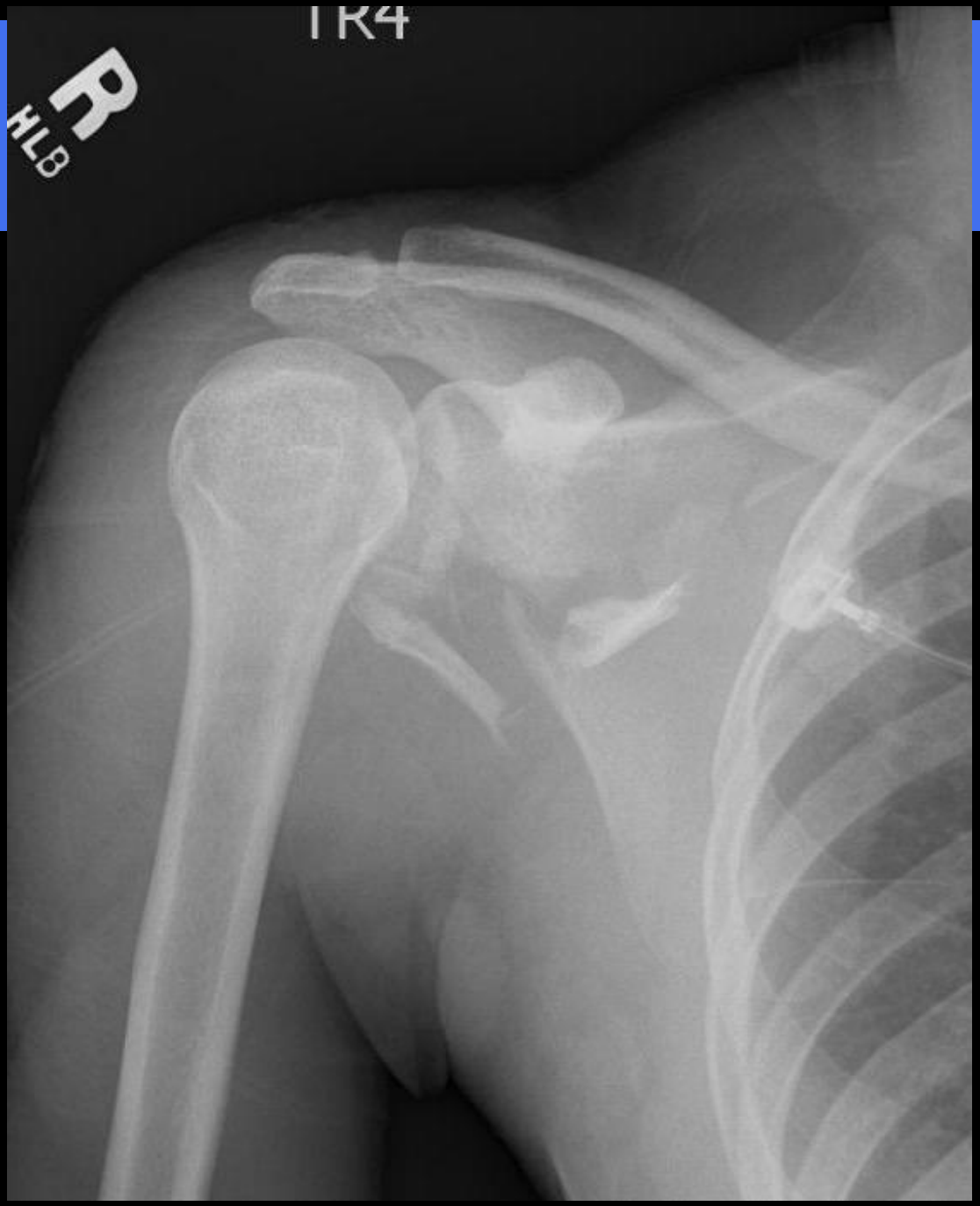

R

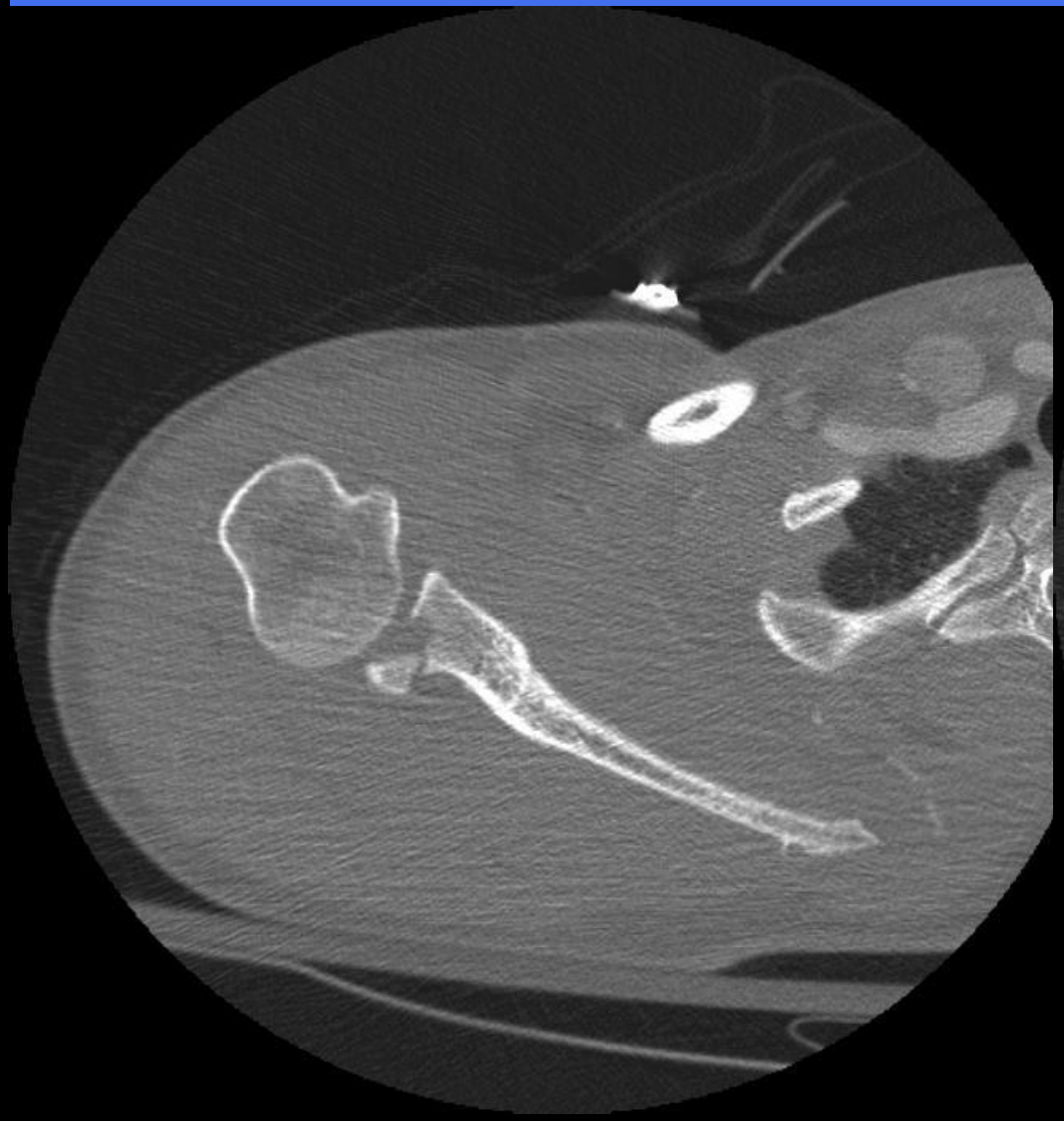
4.5 months postop

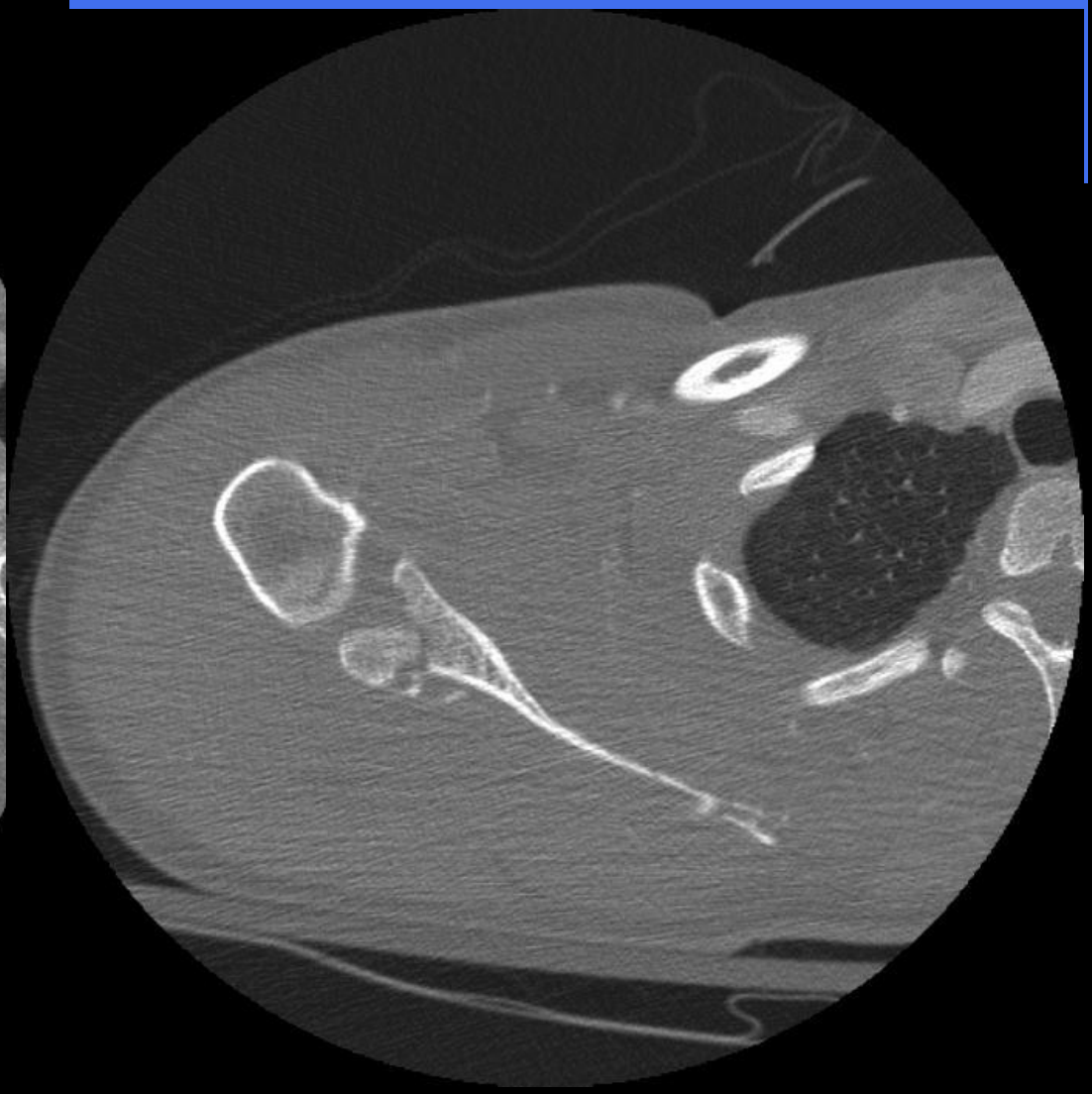


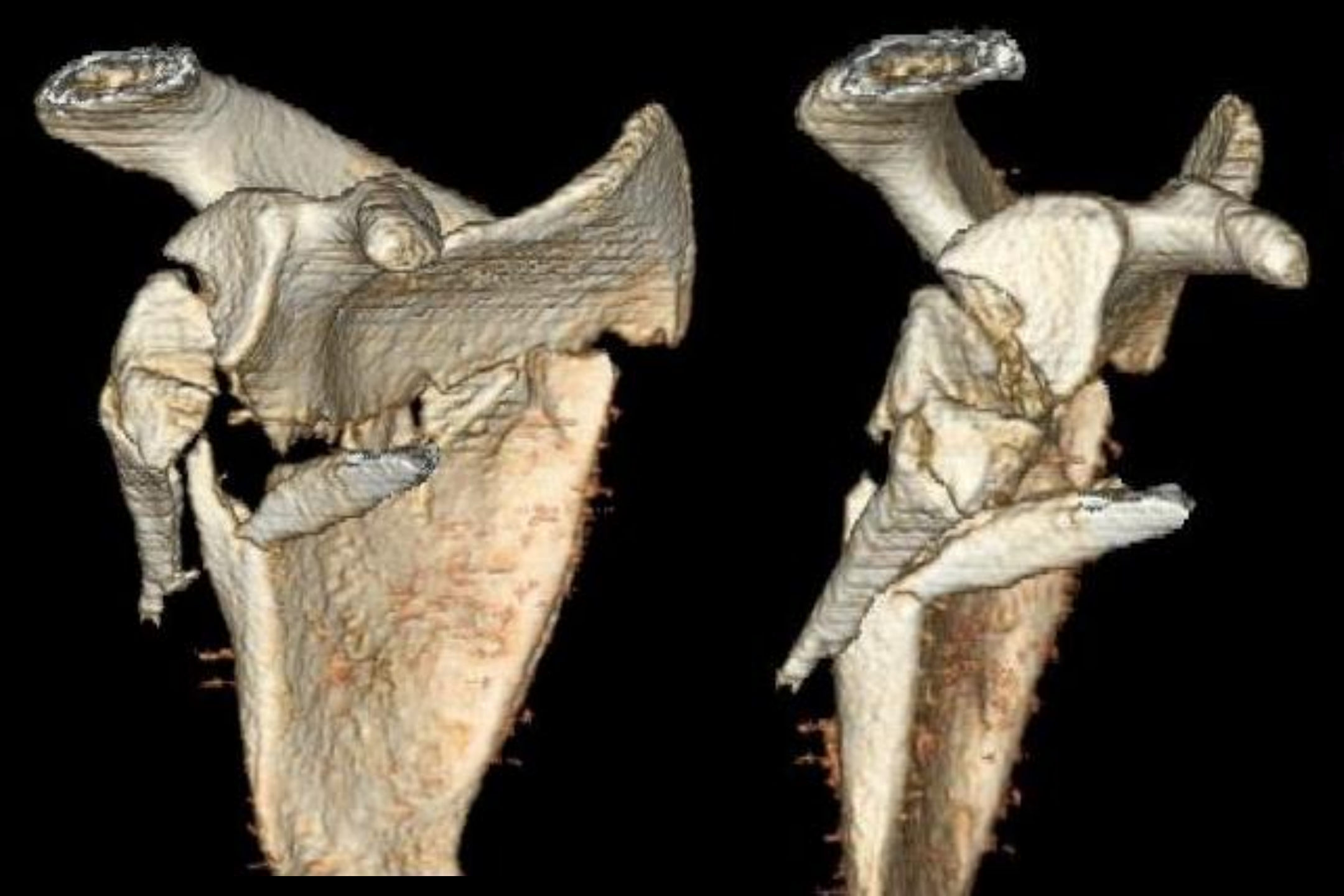
IM

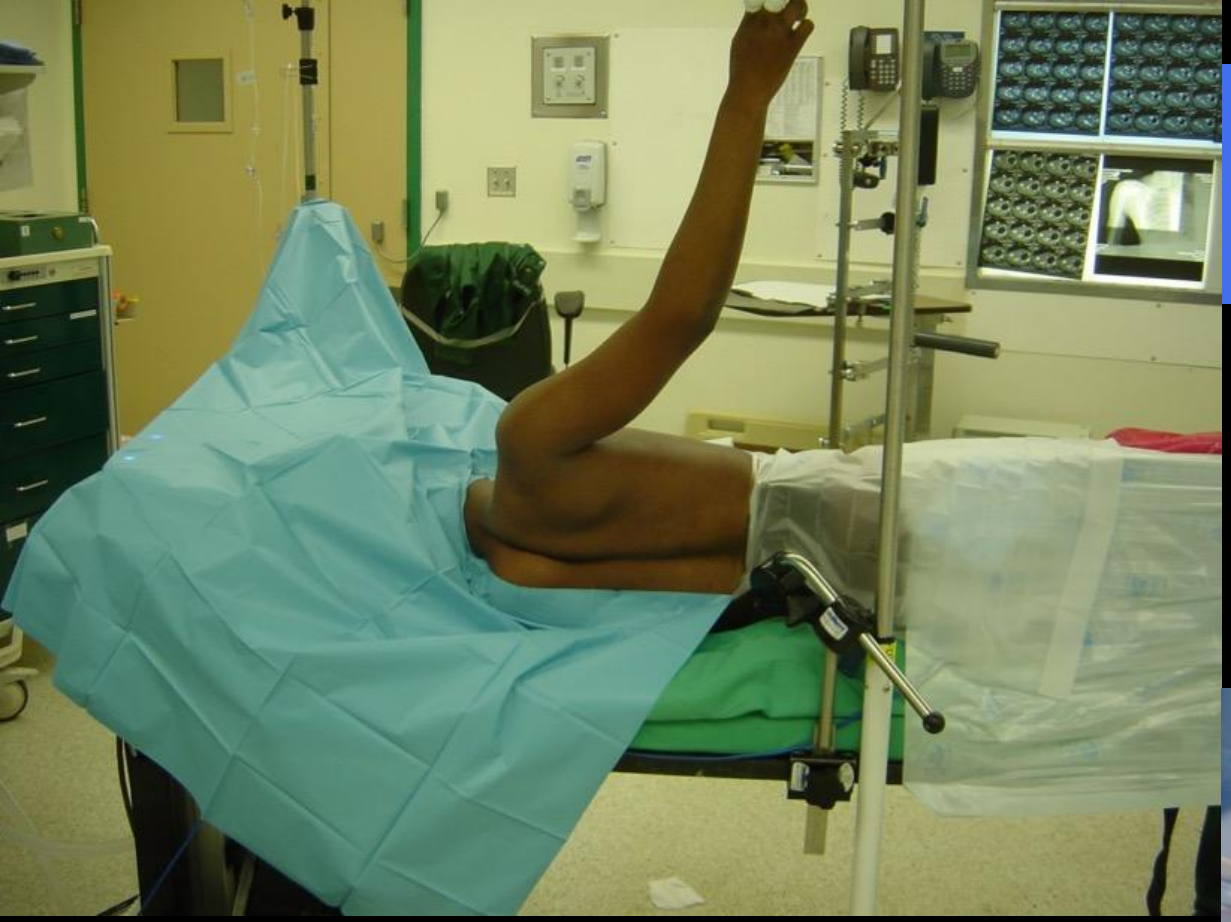
- 30 y/o, hairstylist, RHD
- s/p MCA
- c/o R shoulder pain, isolated injury
- Distally NV WNL

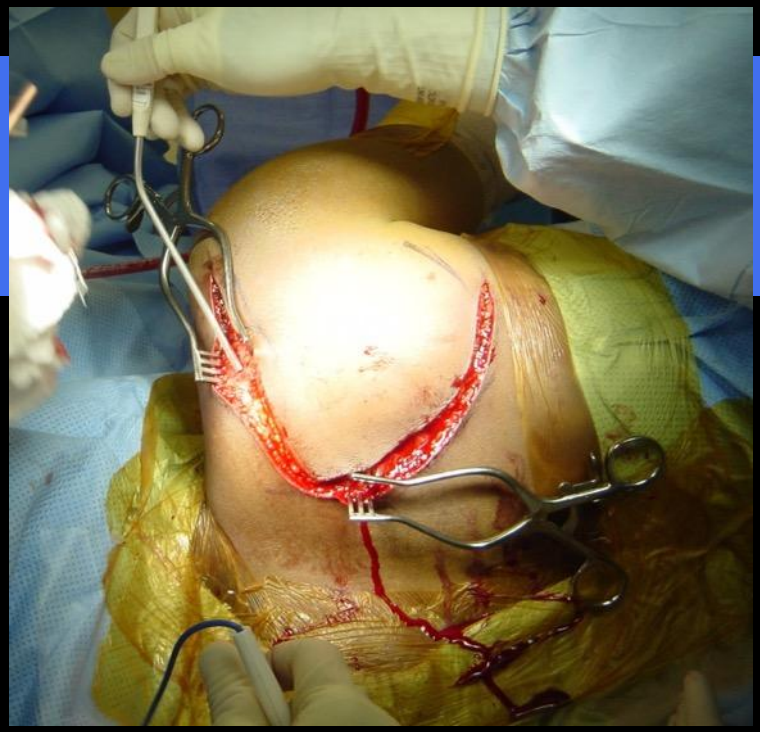

TR4
R
HLB

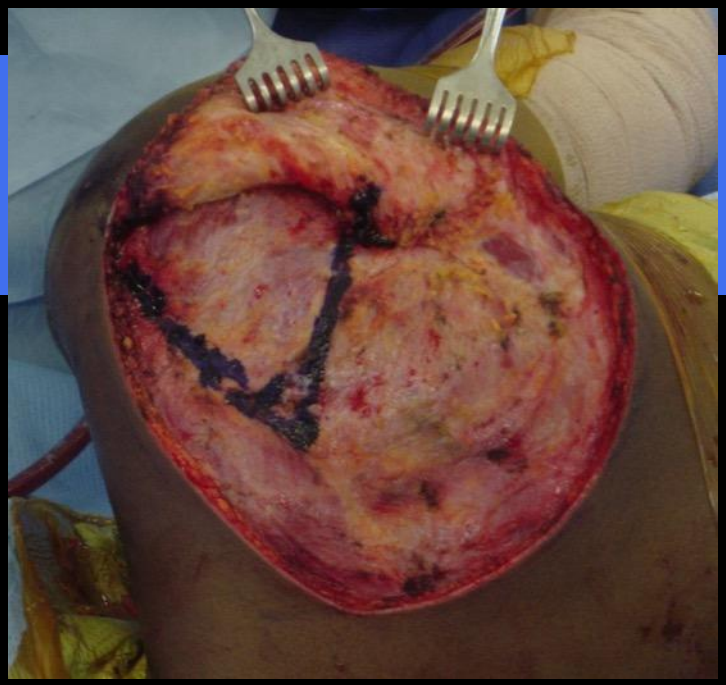


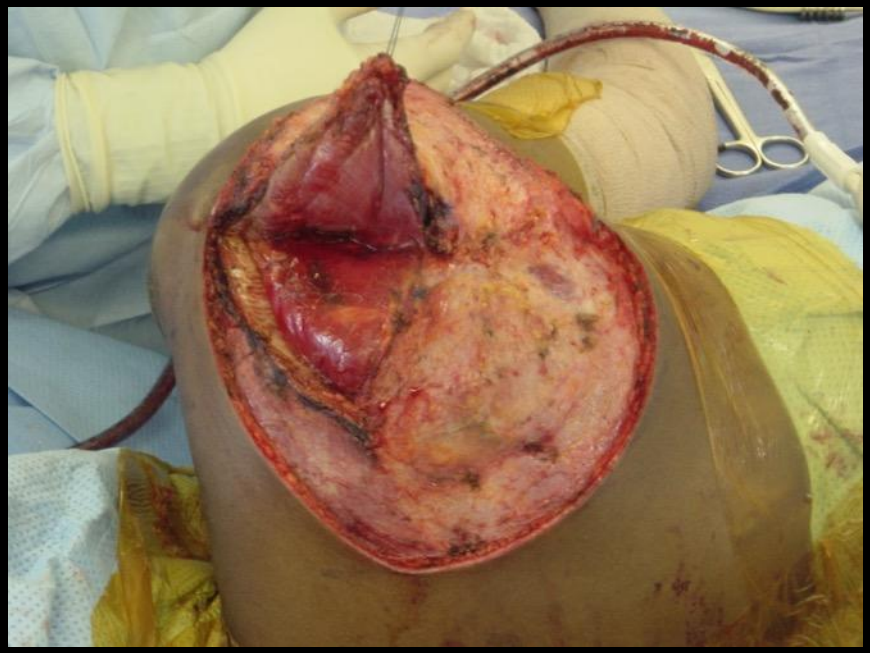


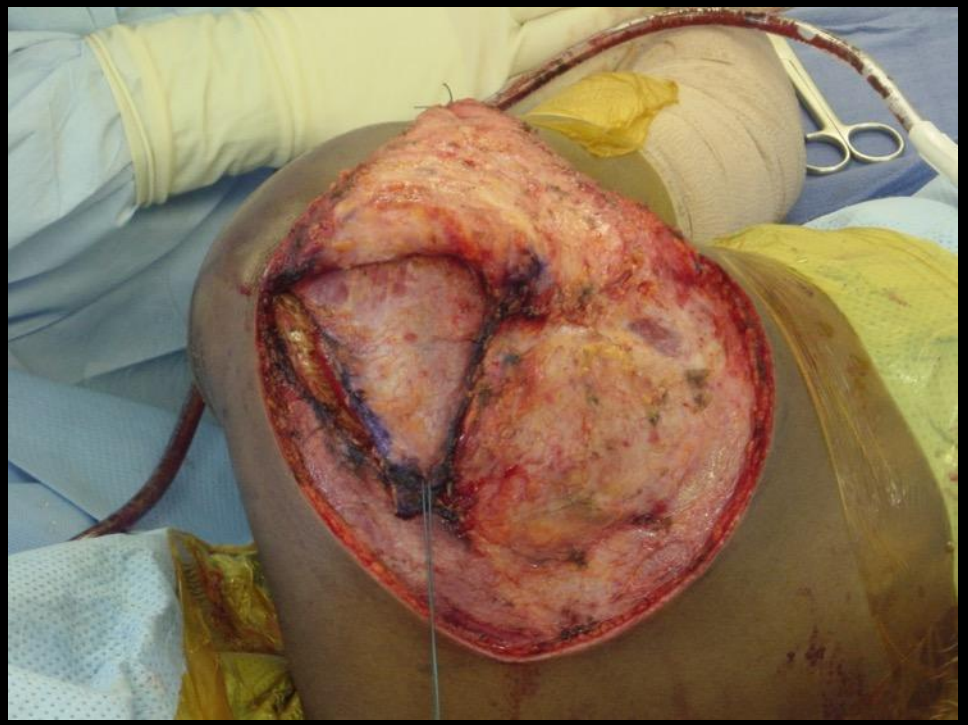


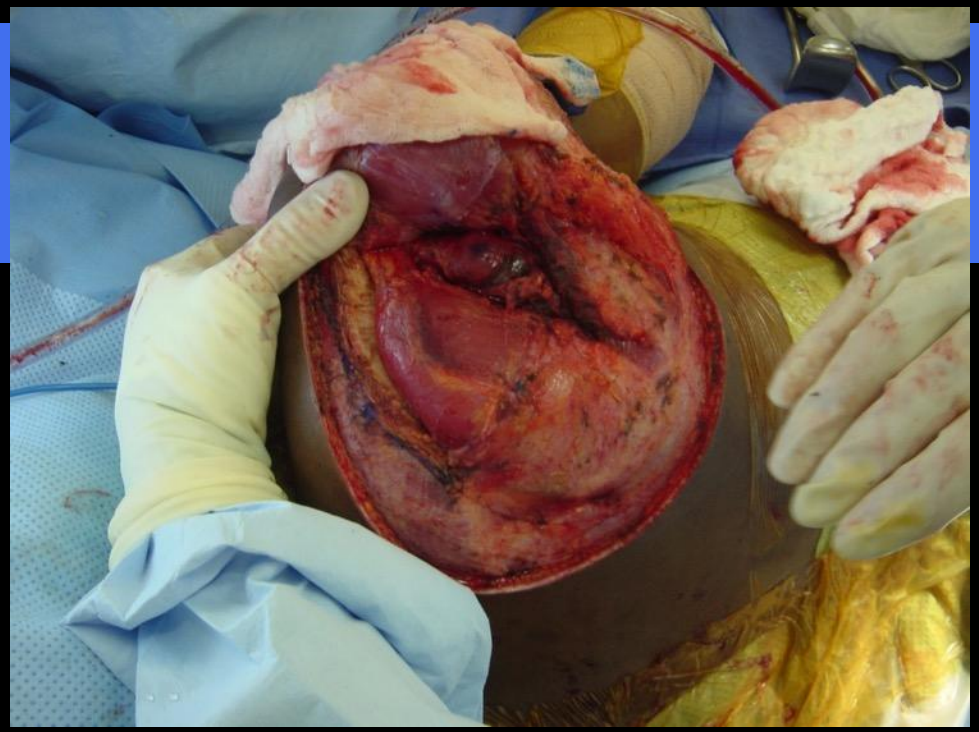


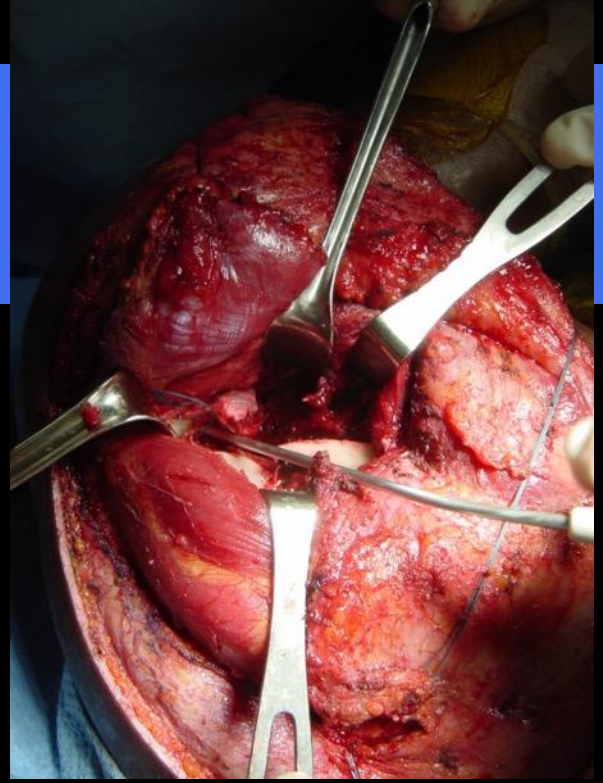


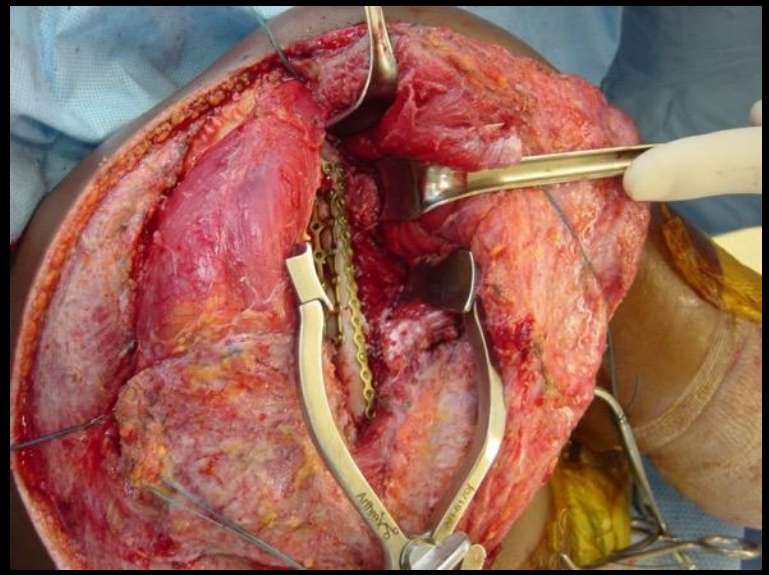


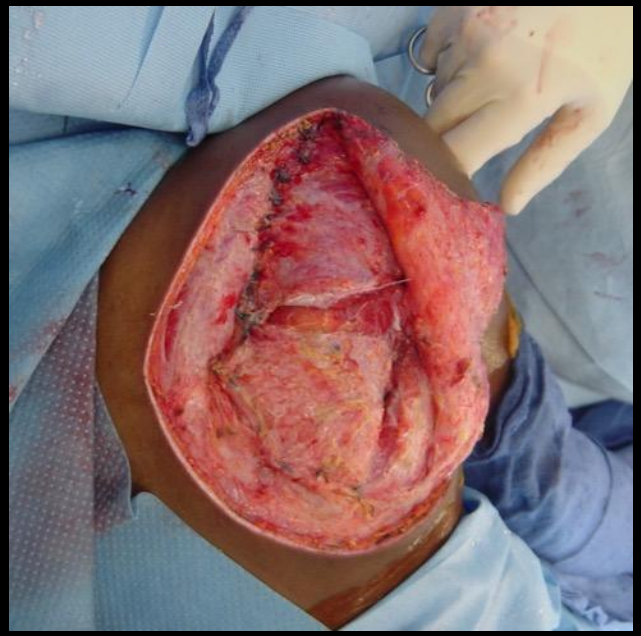


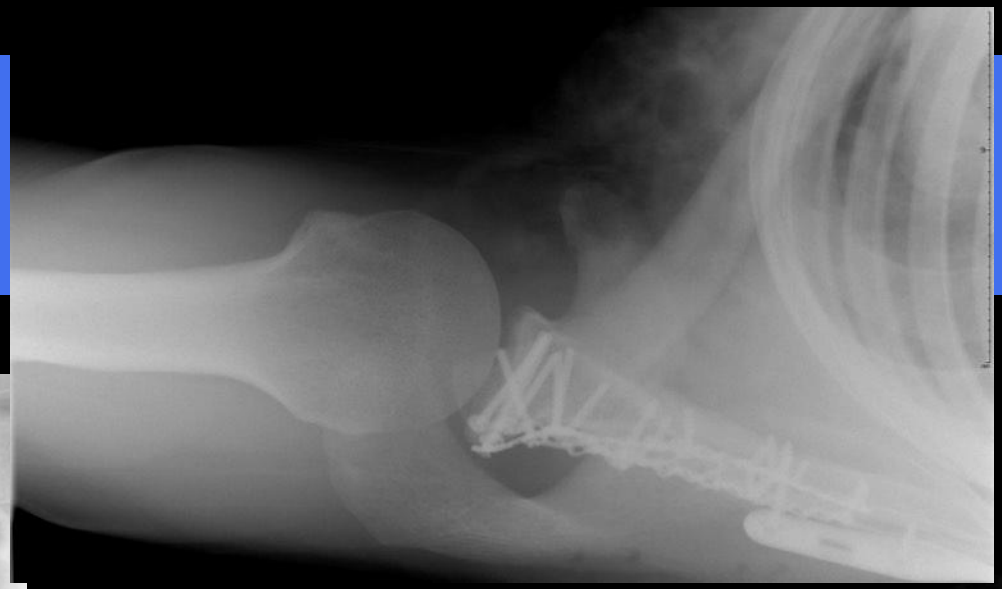


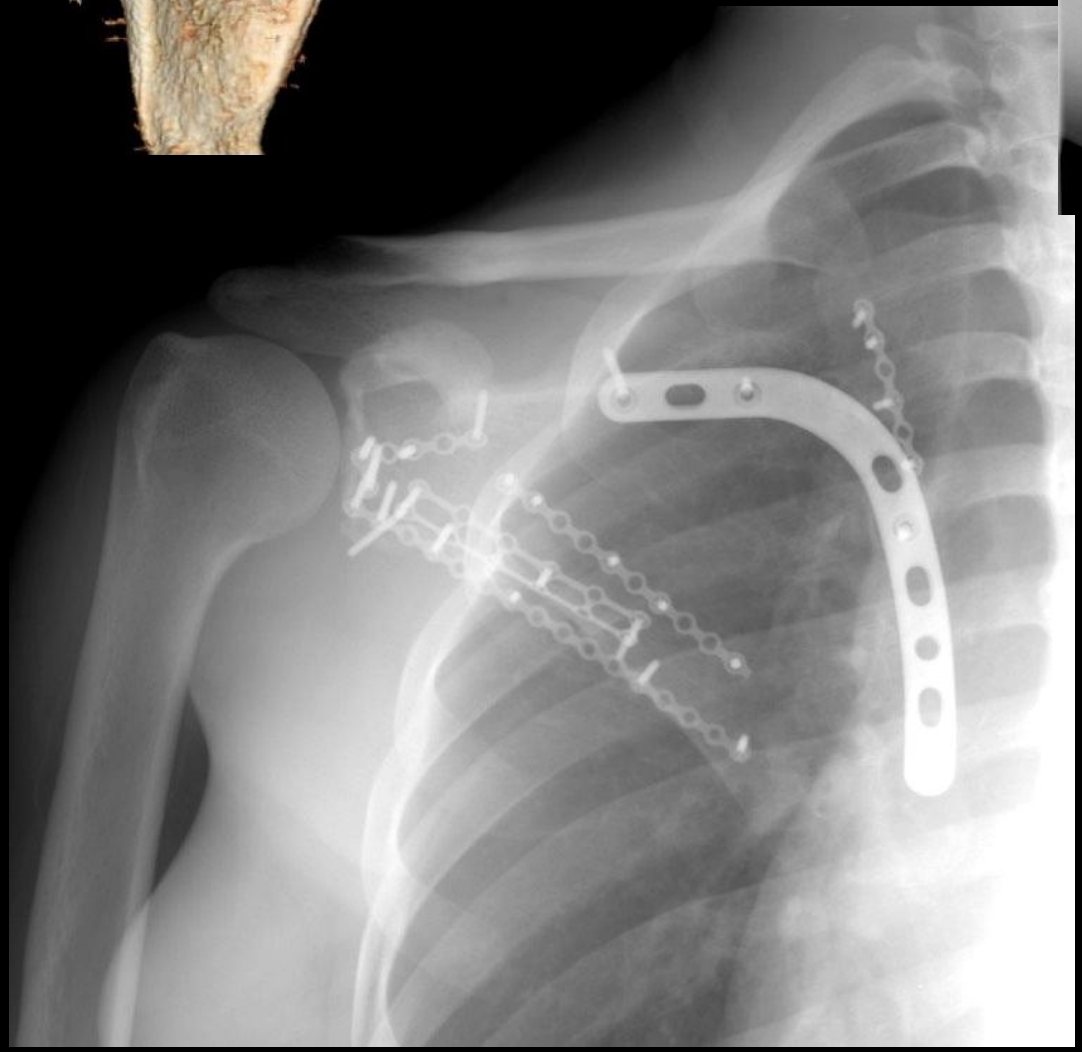


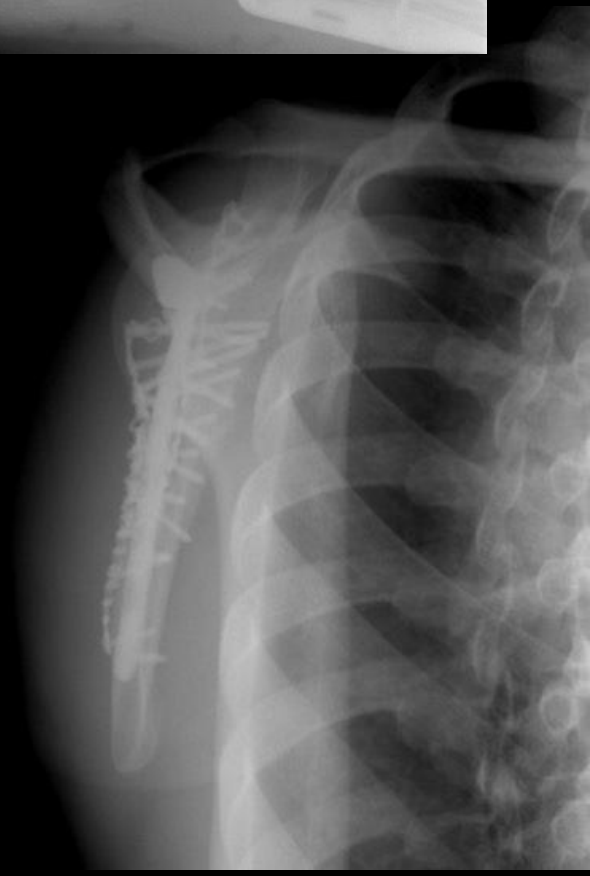




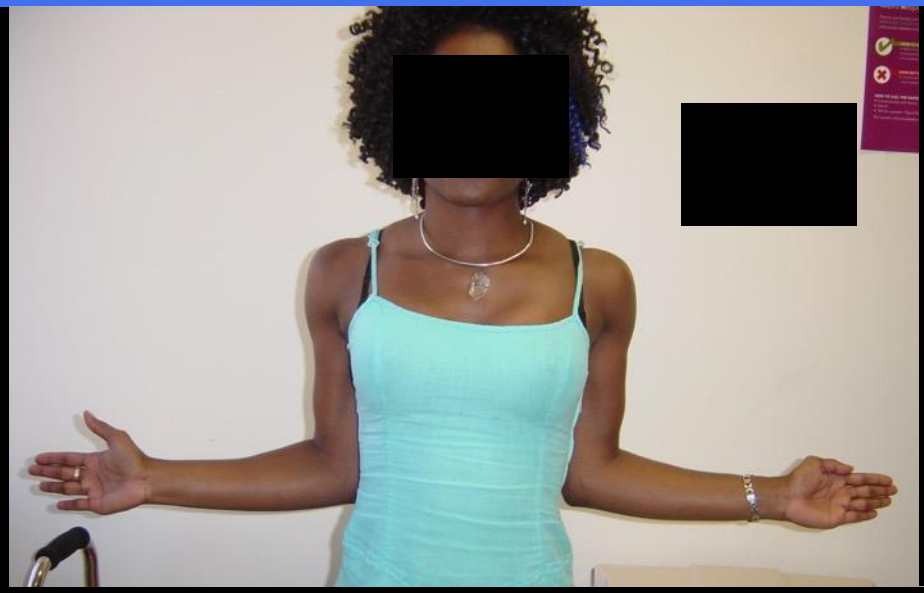








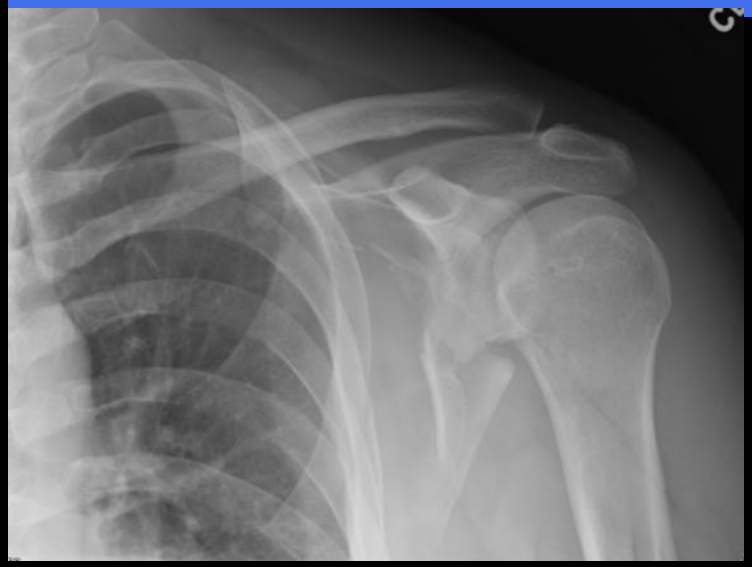
3 months follow up

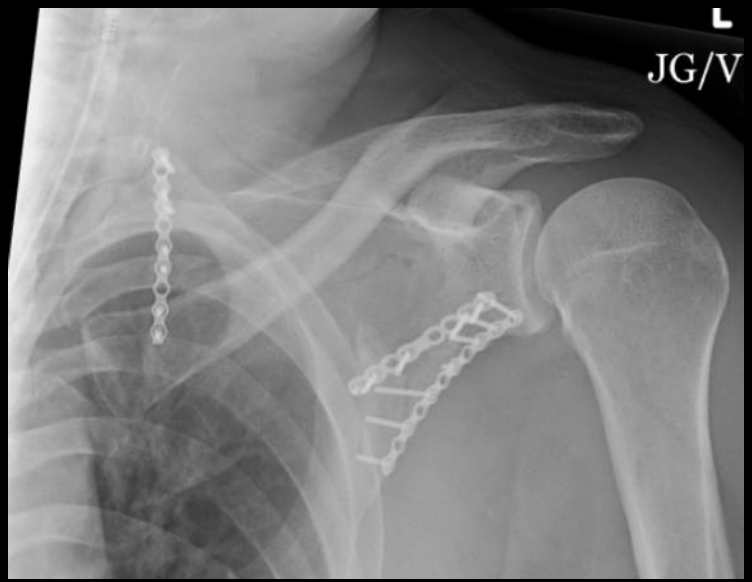


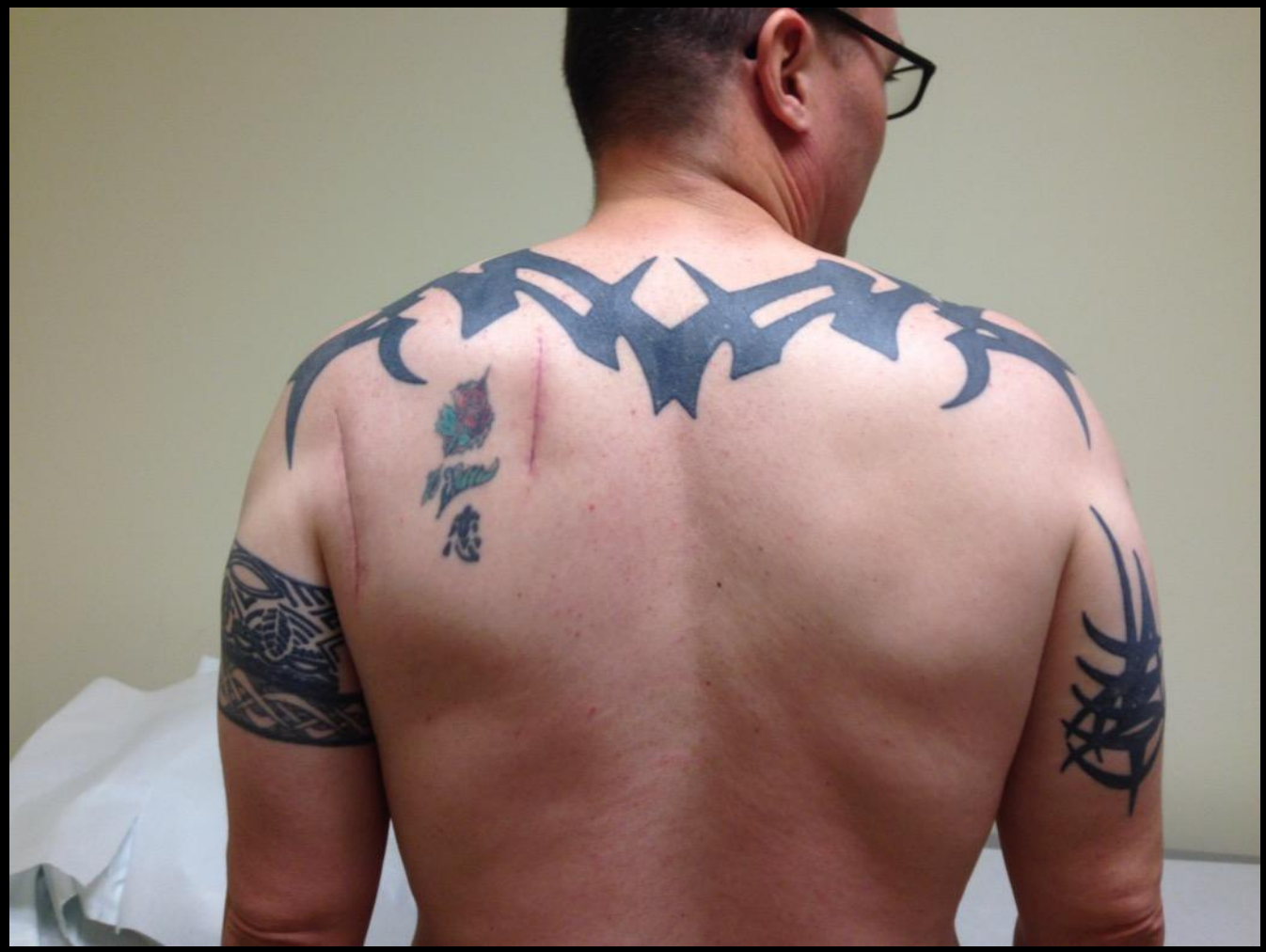
3 months follow up

Limited Posterior Approach

42 y/o, coast guard, s/p MCA: Limited Posterior Approach



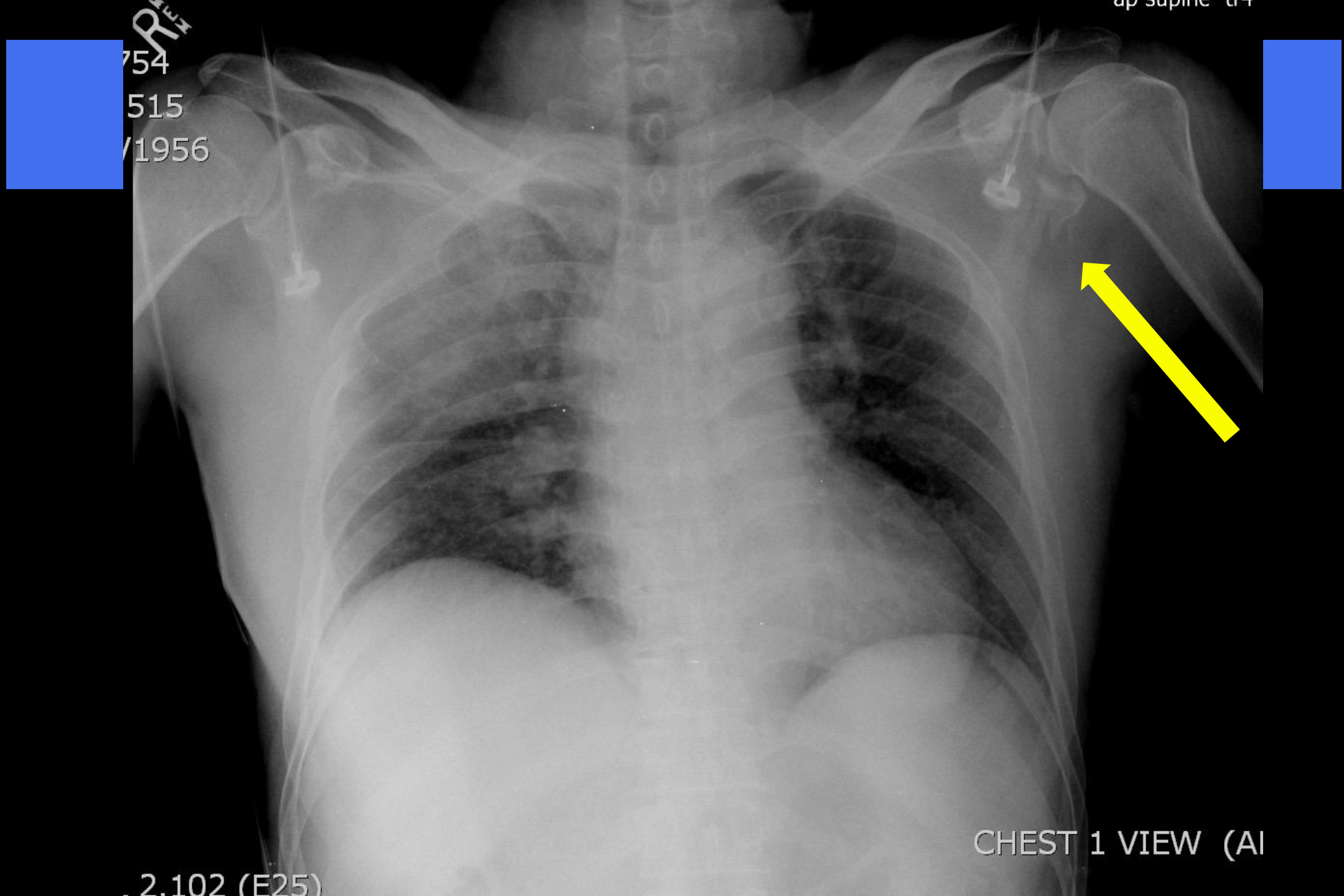


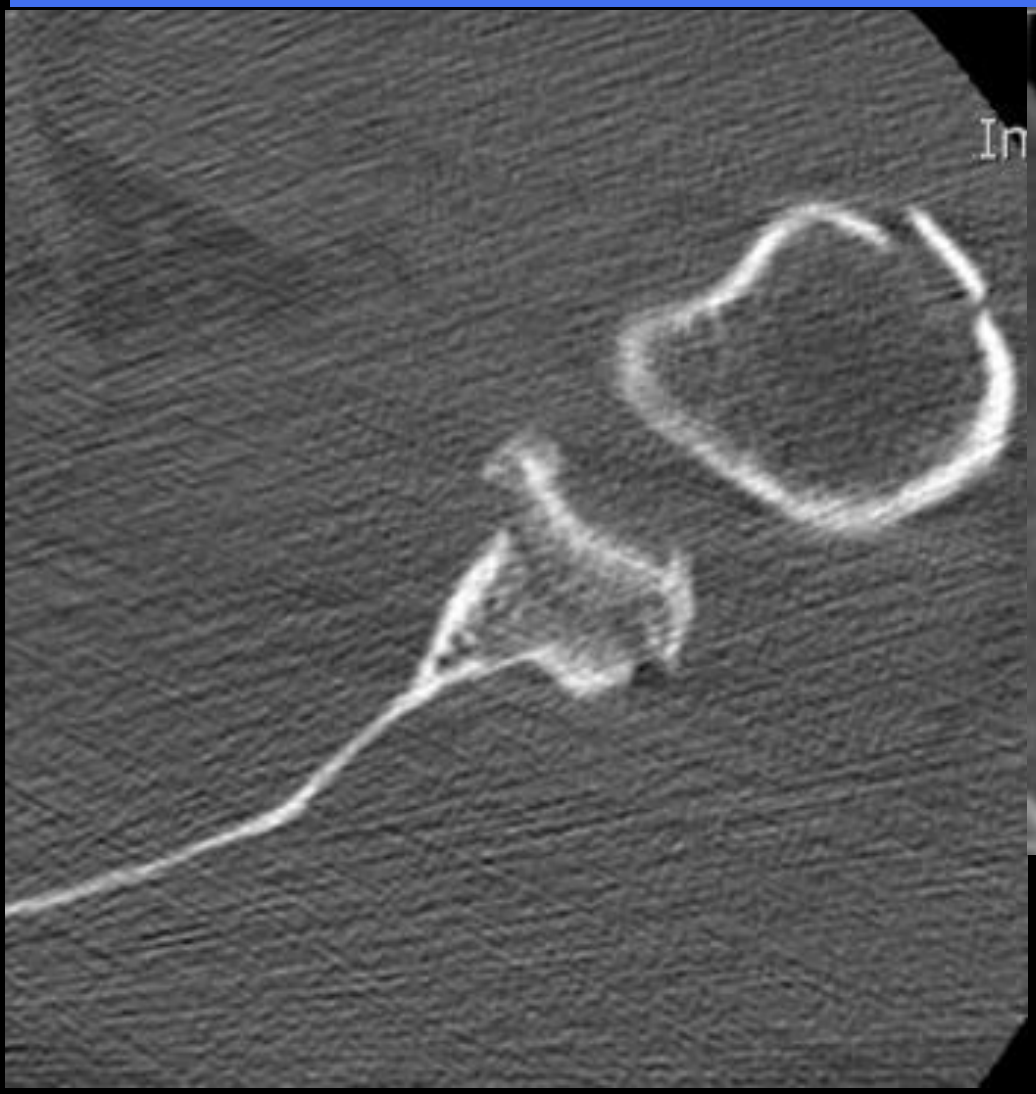


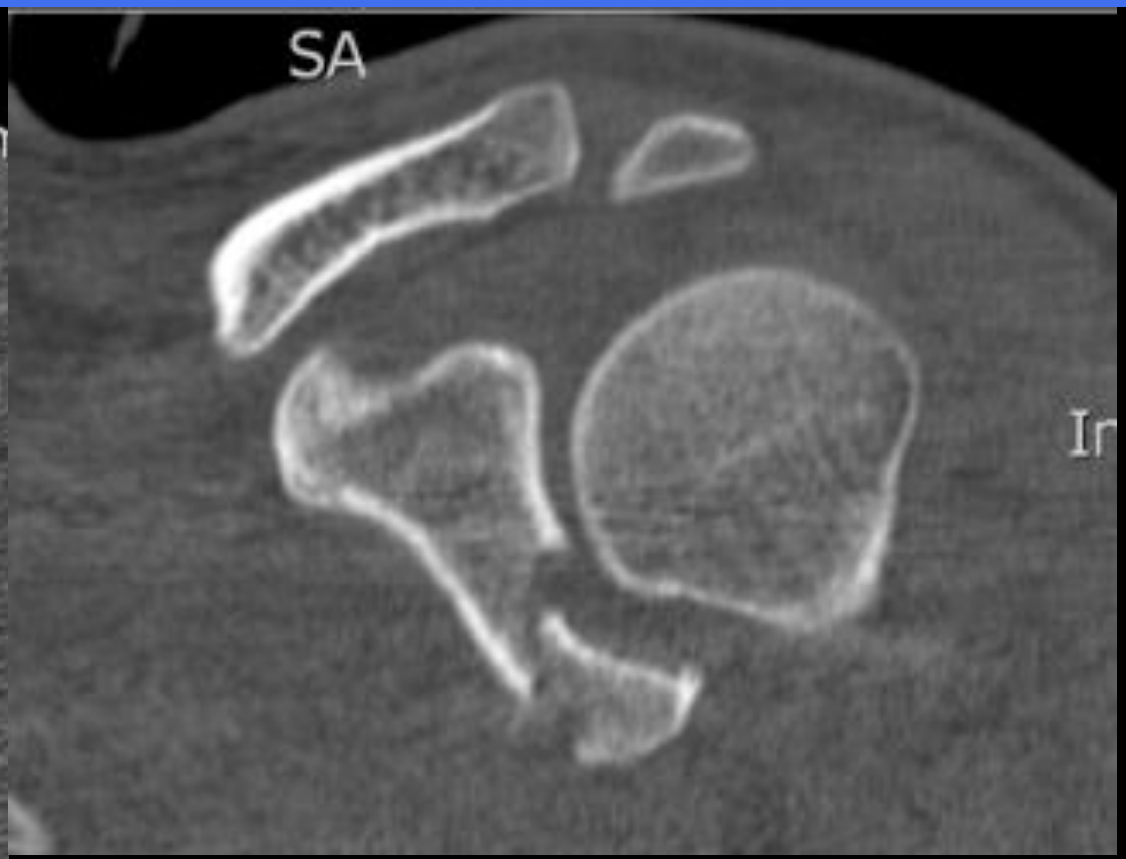
Deltopectoral Approach

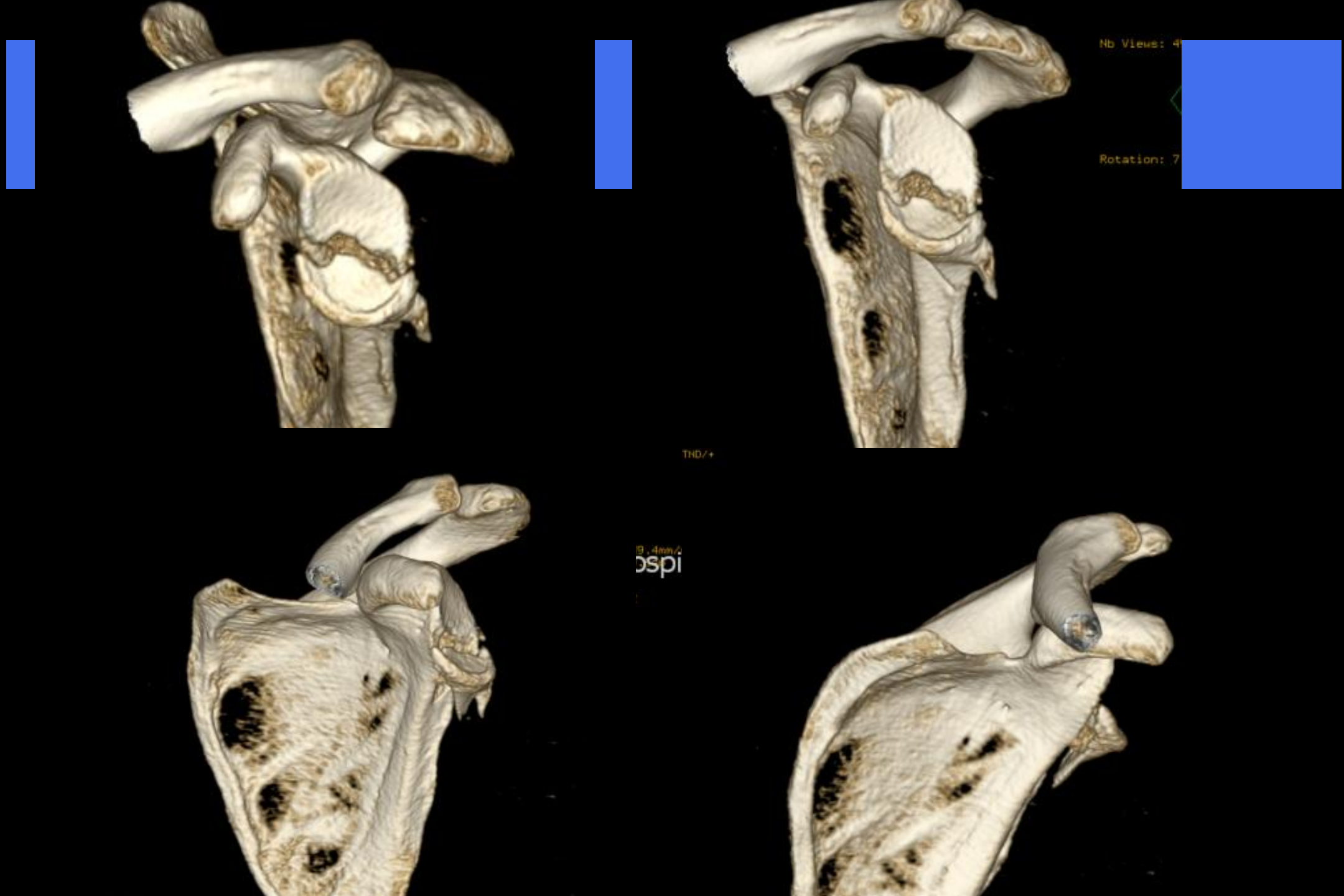
PY

- 56 y/o male
- s/p fall of scaffolding @work
- Multiply injured: c-spine, pelvis, left shoulder

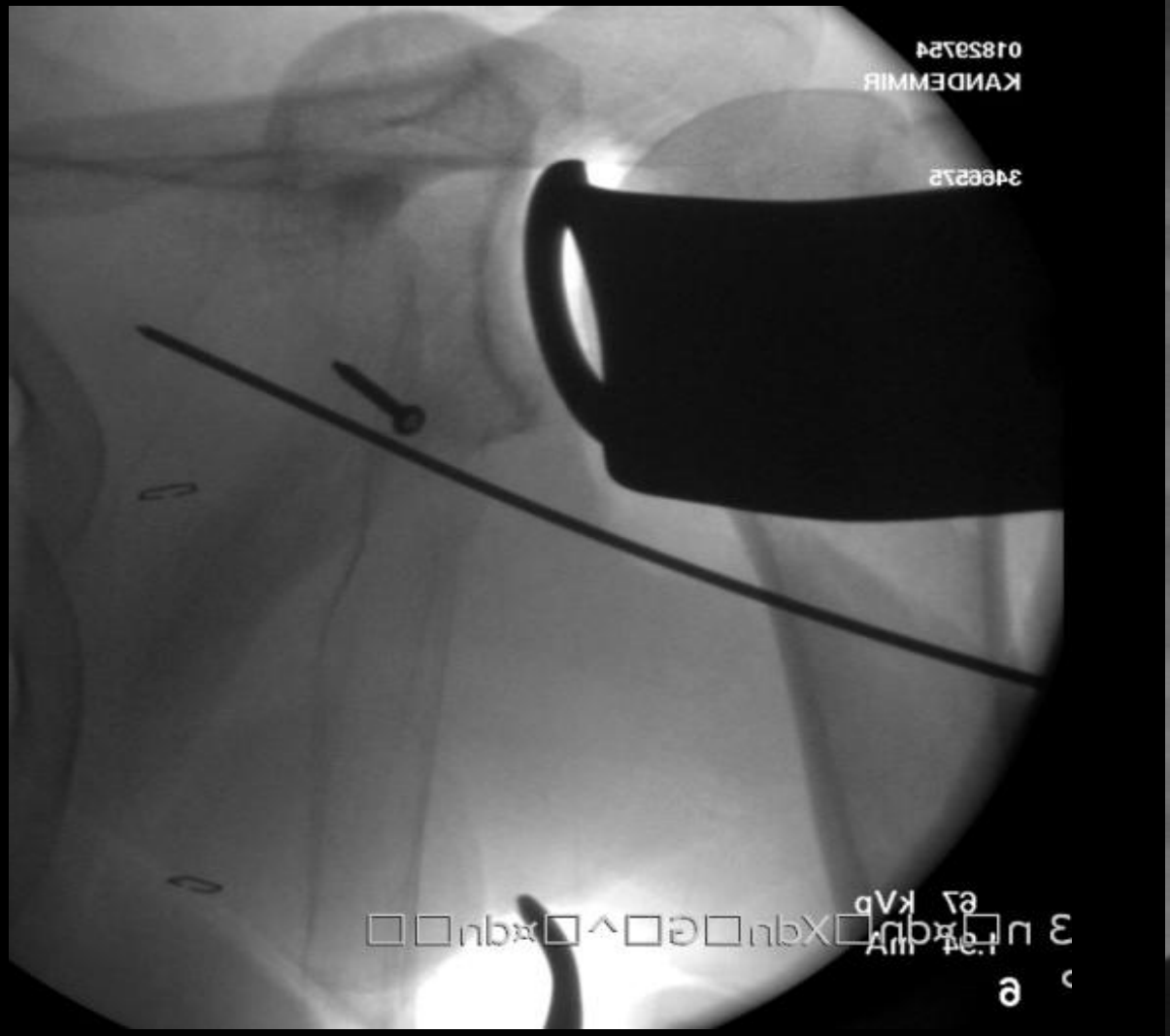

754
515
/1956
ap supine "tl4
CHEST 1 VIEW (AI
. 2.102 (E25)

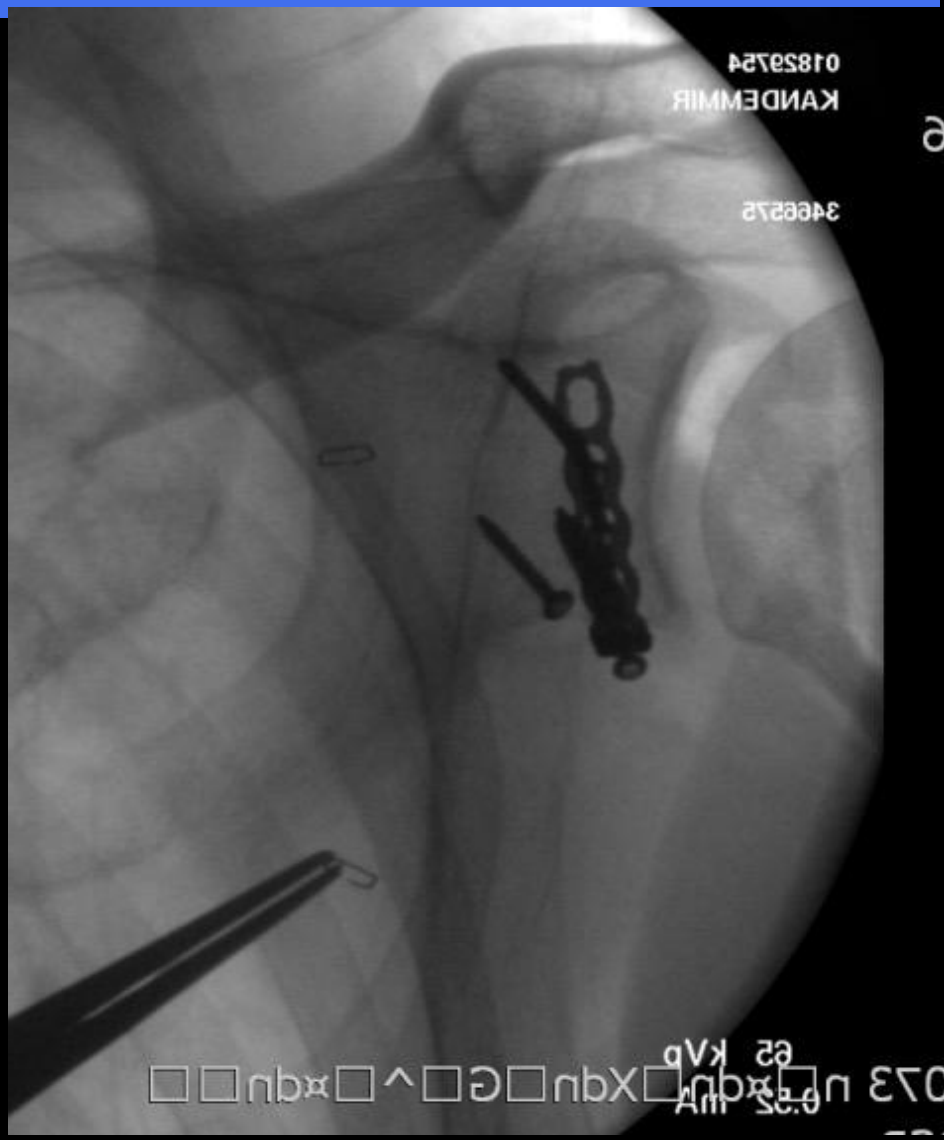



SA

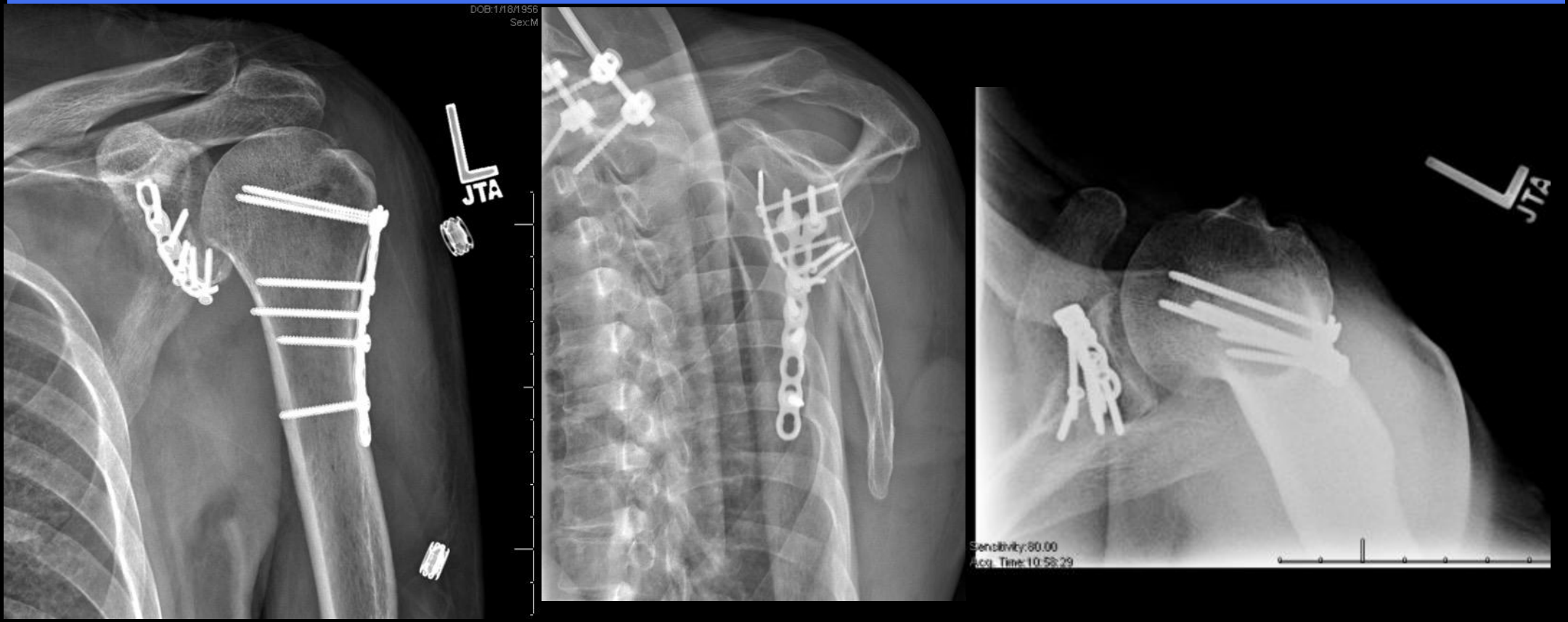

Nb Views: 4
Rotation: 7
TND/+

Deltopectoral Approach

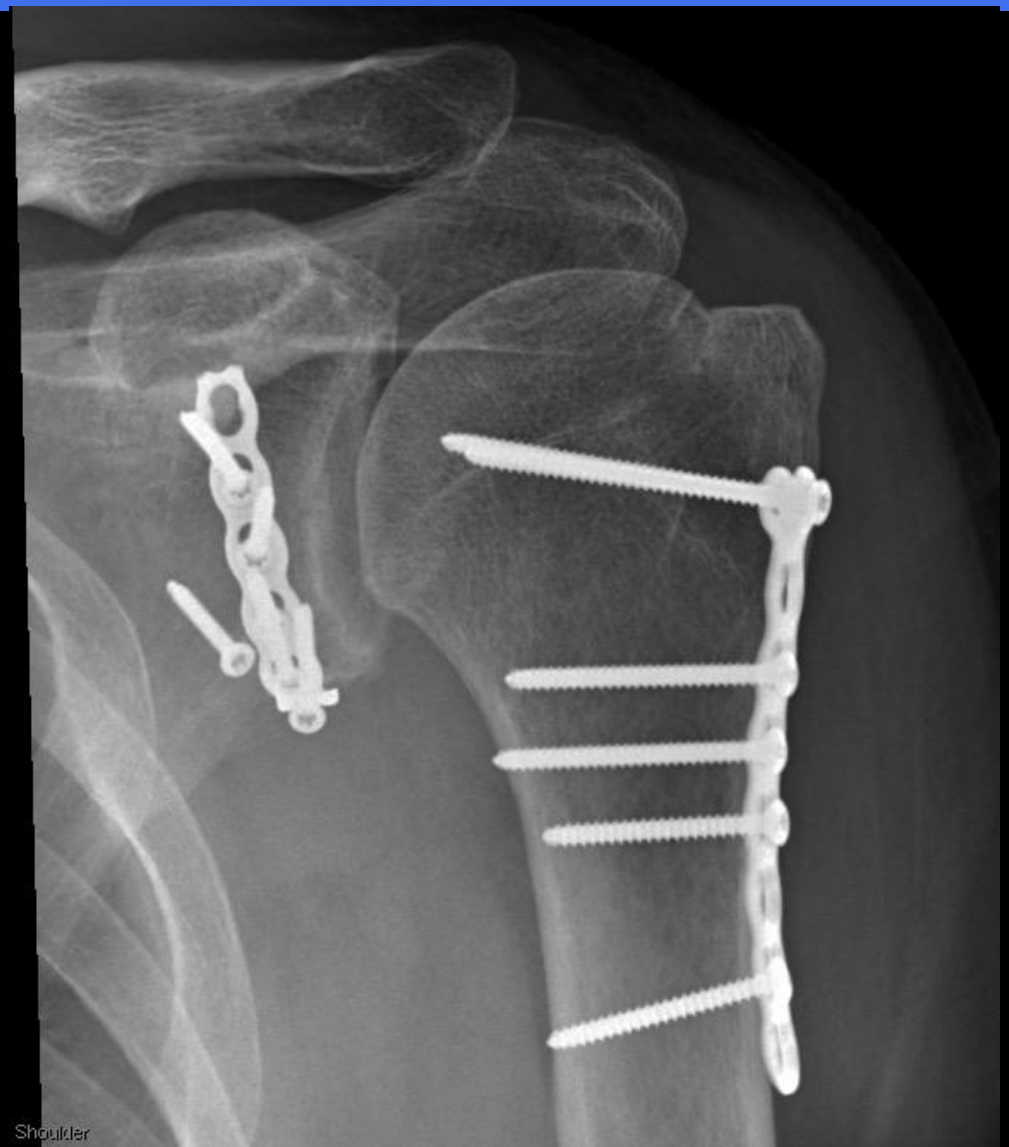


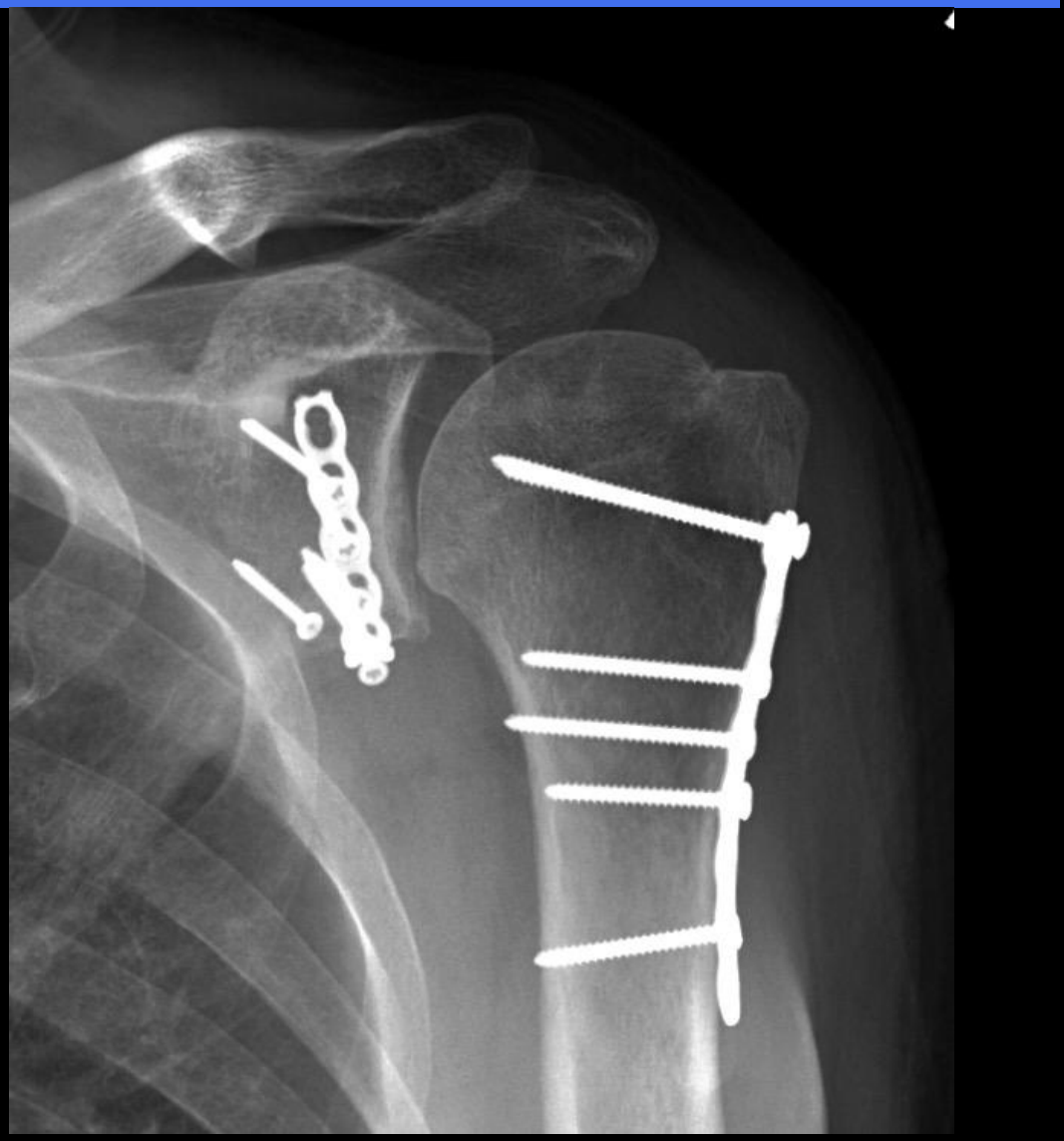


56 yo, Deltopectoral Approach

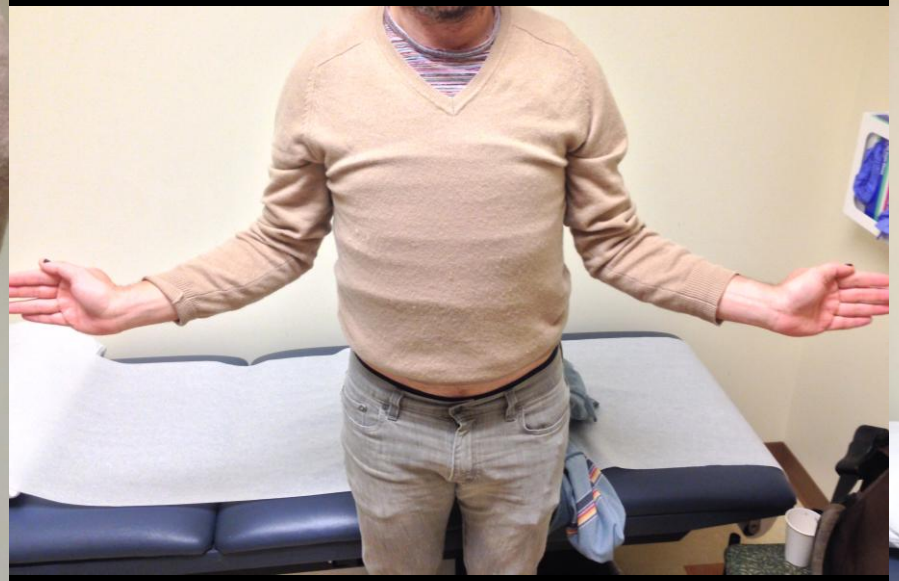


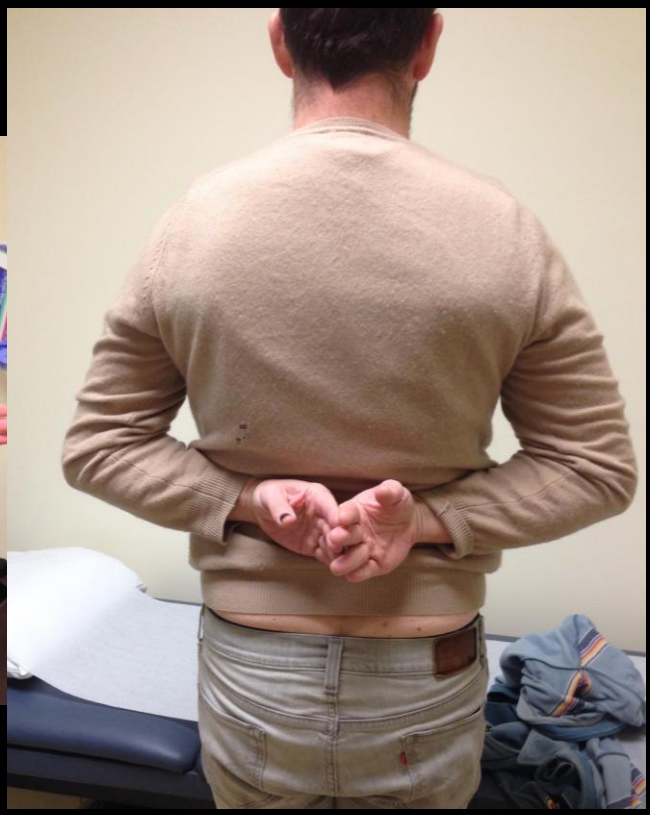
56 yo, Deltopectoral Approach





56 yo, Deltopectoral Approach



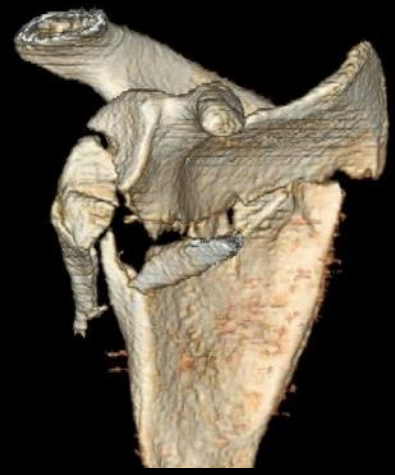


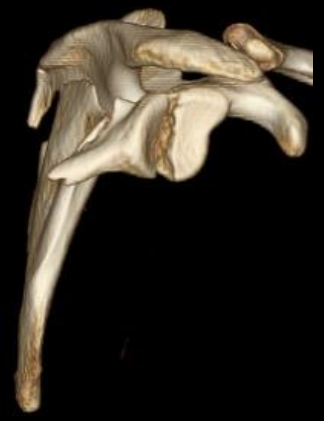
Indications

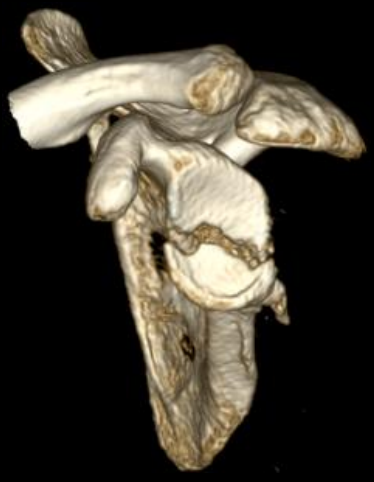
- GLENOID:
  - Instability
  - Articular step-off >3-4mm
  - Glenopolar angle <22°
- BODY:
  - Lateral Border Offset >2cm
  - Body Angulation >45°
  - Clavicle & Scapula Displacement >1cm

Take Home Messages

- Analyze fracture pattern
  - Anterior vs. Post Approach
- When Post
  - Limited vs. Modified Judet
- Attention
  - Suprascapular NV Bundle
  - Axillary nerve







THANK YOU

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UCSF + SAN FRANCISCO GENERAL HOSPITAL