



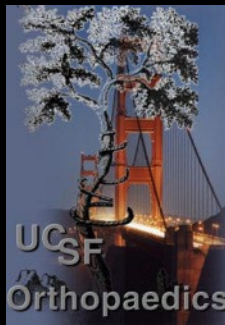
Glenoid & Scapula Fxs



Utku KANDEMIR, MD

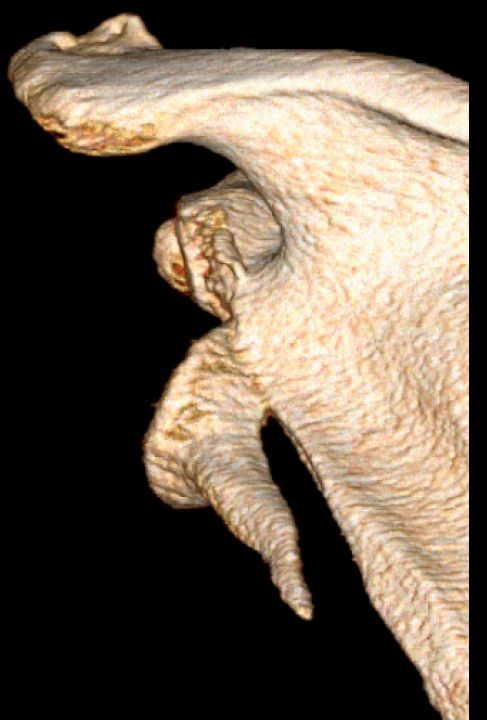
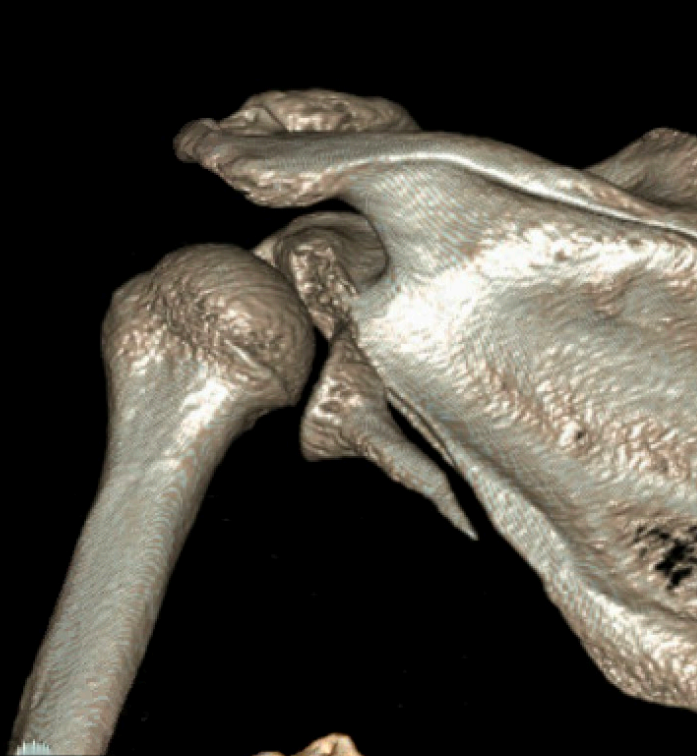
Professor

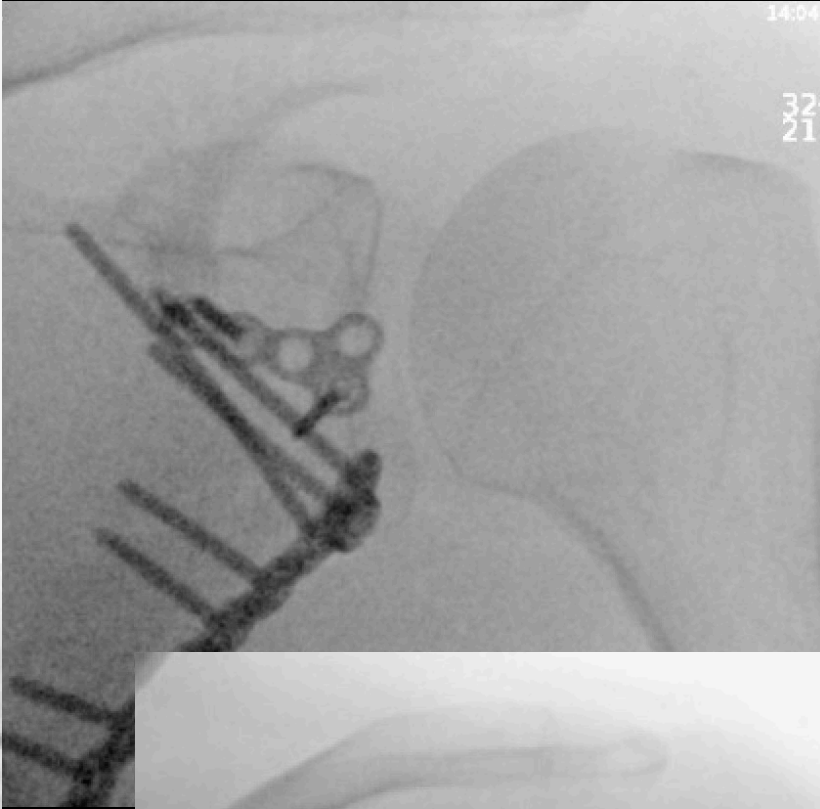
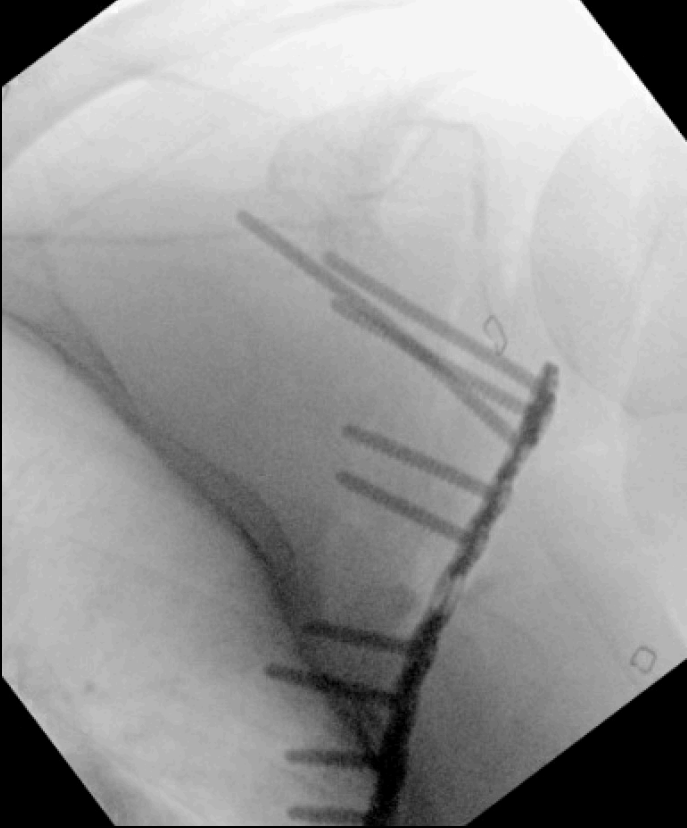
University of California, San Francisco



90126130









FRACTURES.

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

Fig. 1.

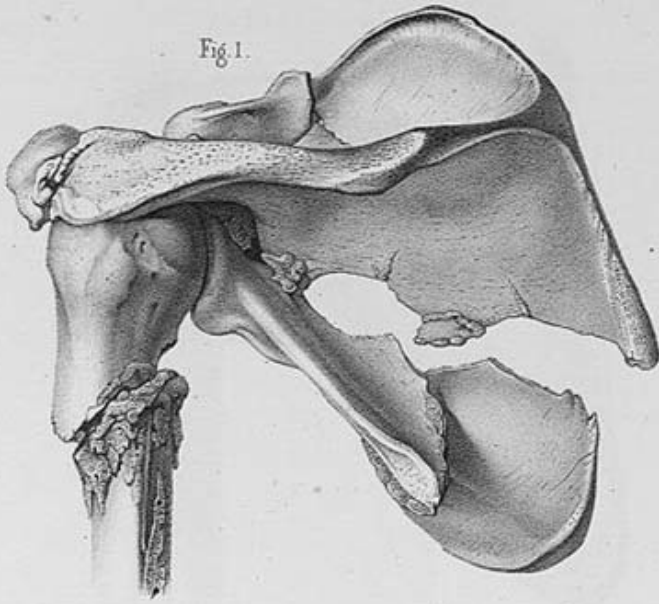


Fig. 3.

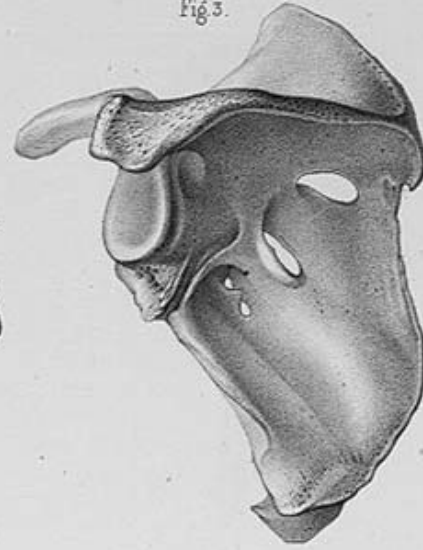


Fig. 2.

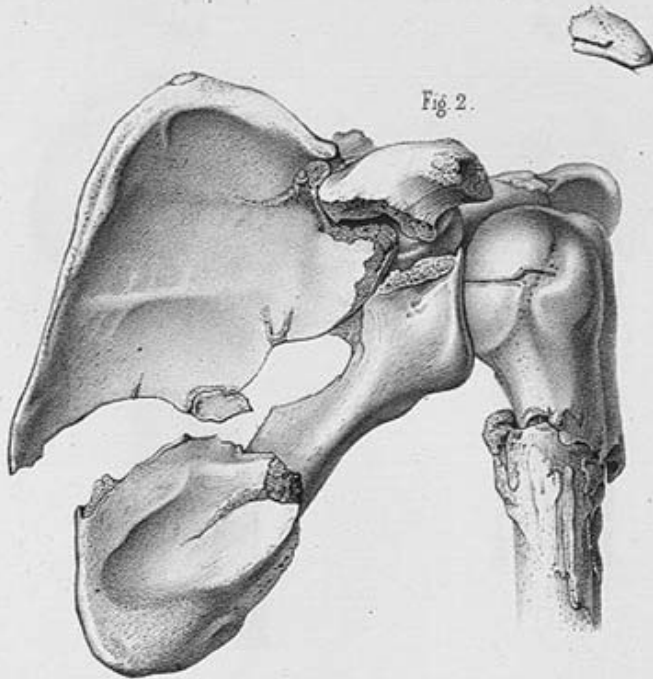
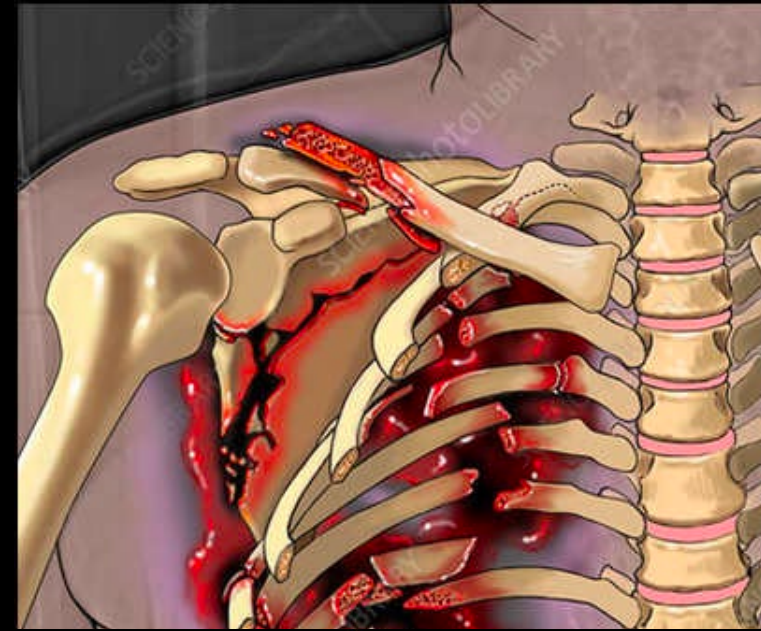


Fig. 4.

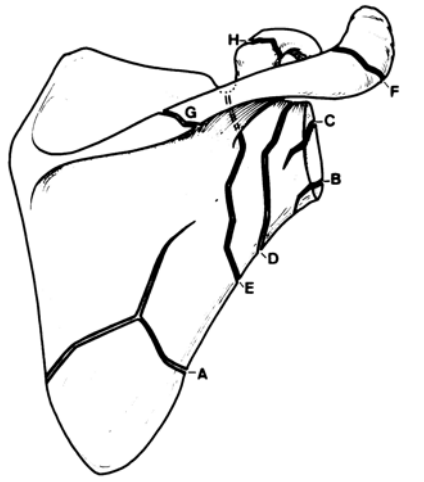


Associated Injuries

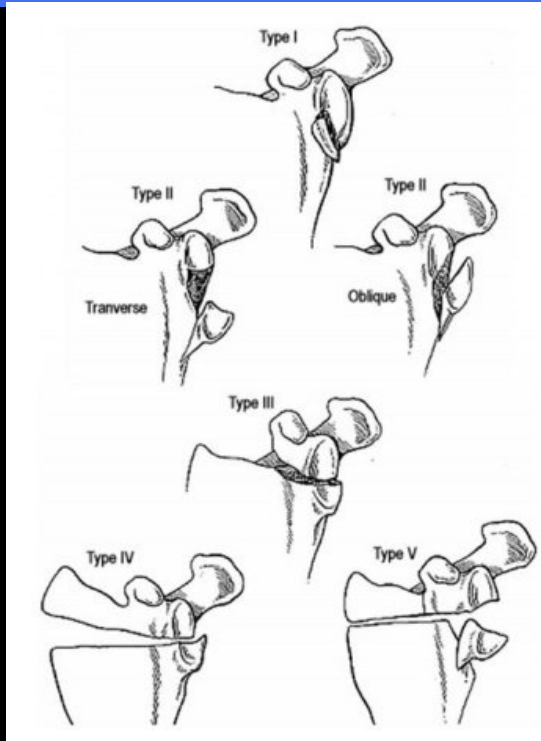
- 95%: High energy!
 - Ribs, clavicle, Hemo/Pneumothorax
- 50 % ipsilateral extremity
- 15% C-spine
- 15% TBI



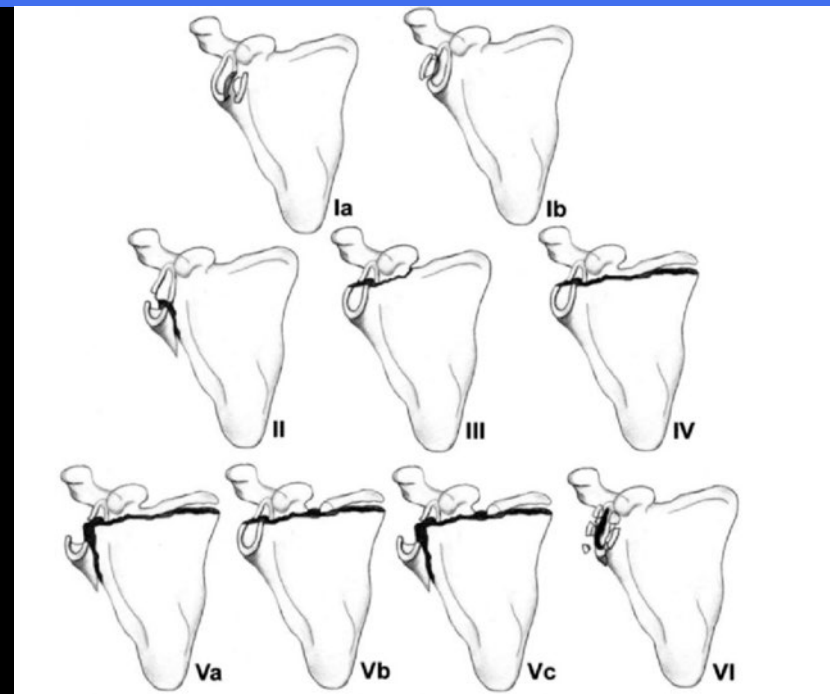
Scapula Fractures



Hardegger

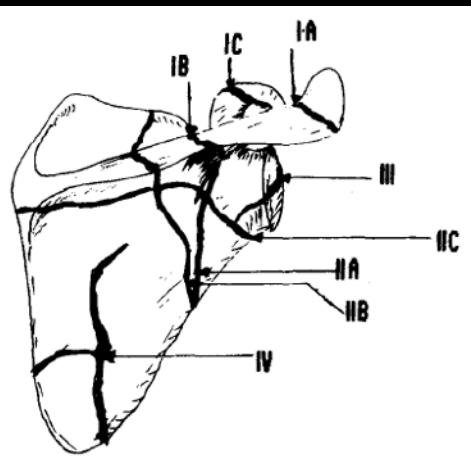


Ideberg



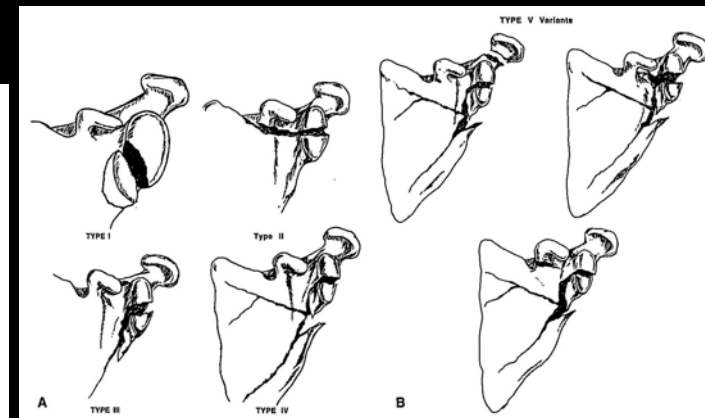
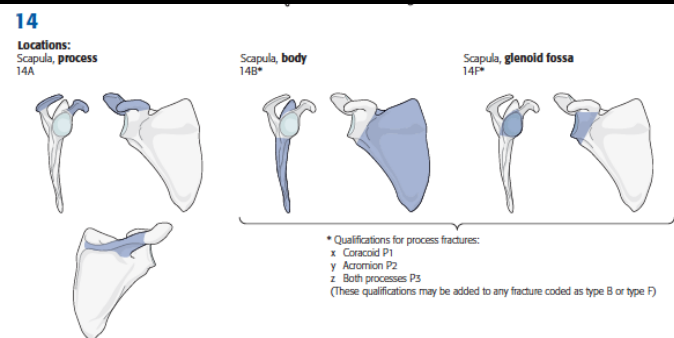
Goss

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



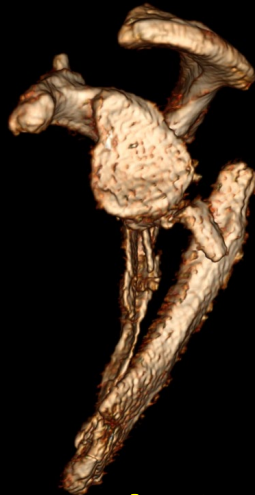
Articular step-off



Medialization



SSSC

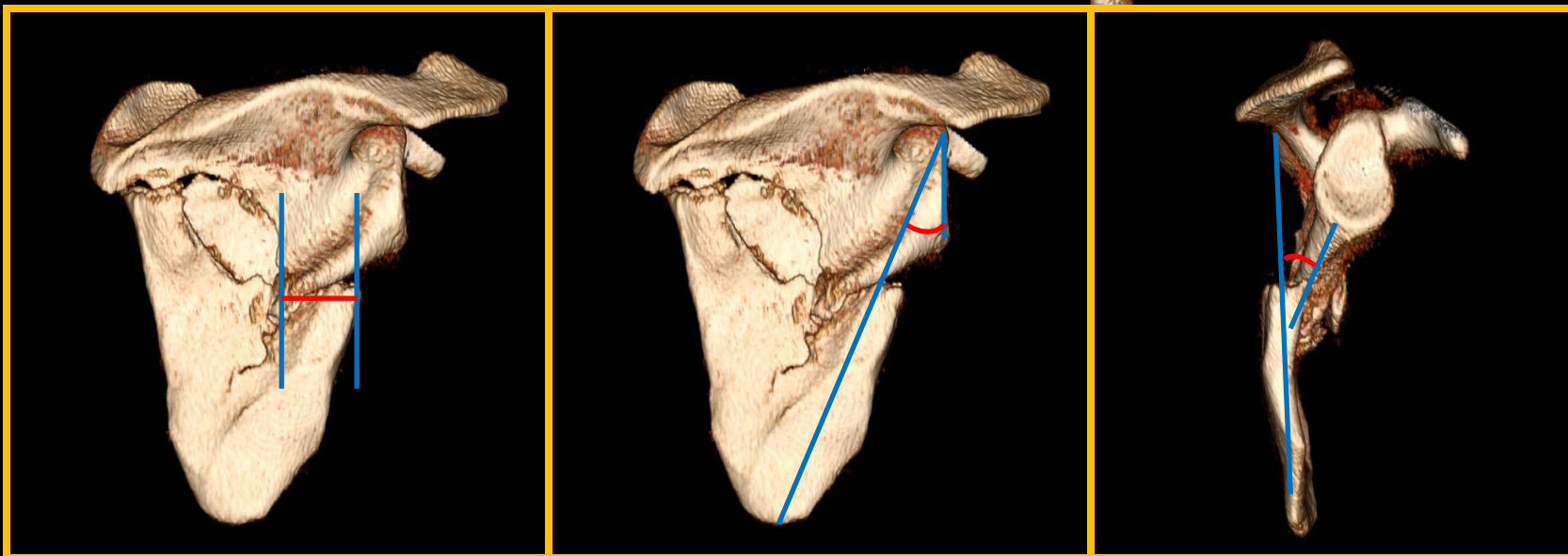
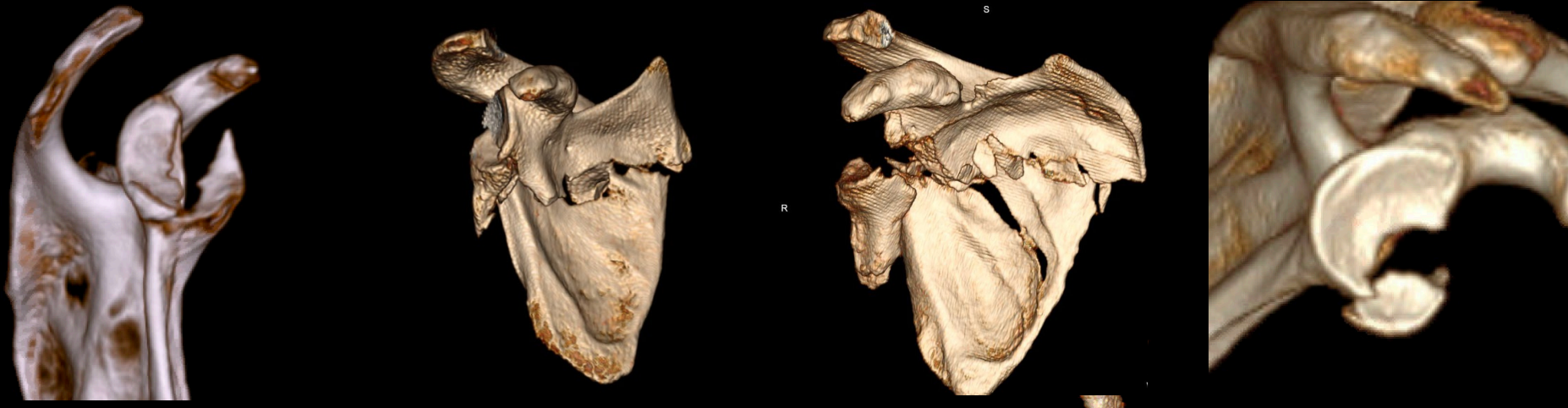


Angulation

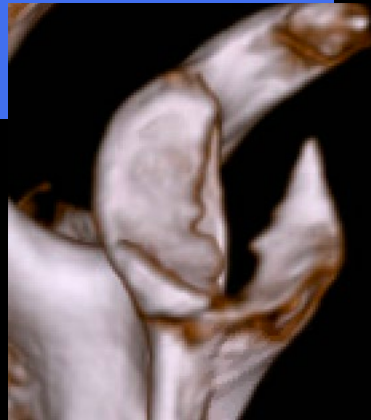


Glenopolar angle

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)

≥ 4 mm

Jones CB, et al
(2009)

>3mm

Jones CB, et al
(2011)

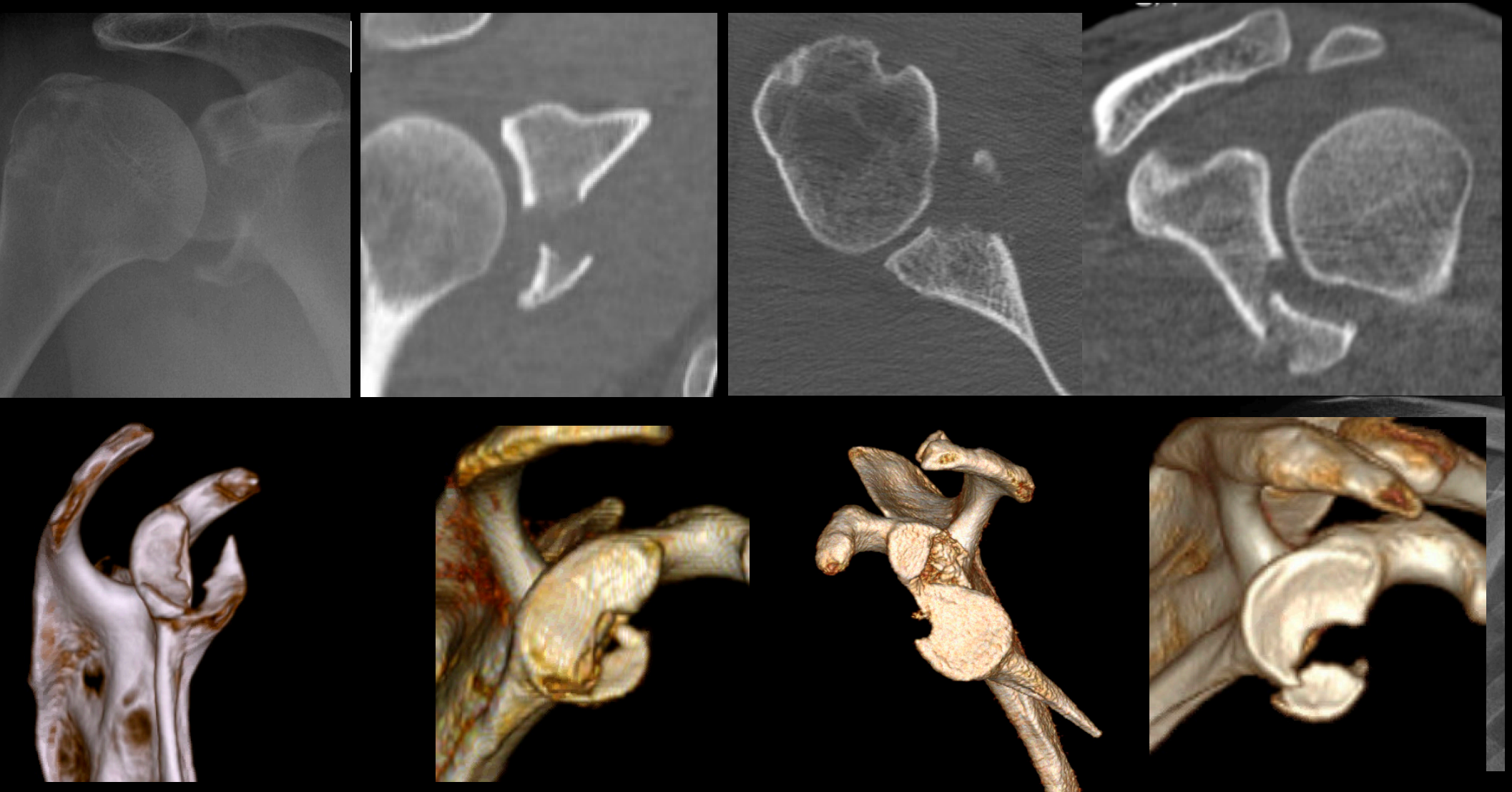
>3mm

Anavian J, et al
(2012)

≥ 4 mm



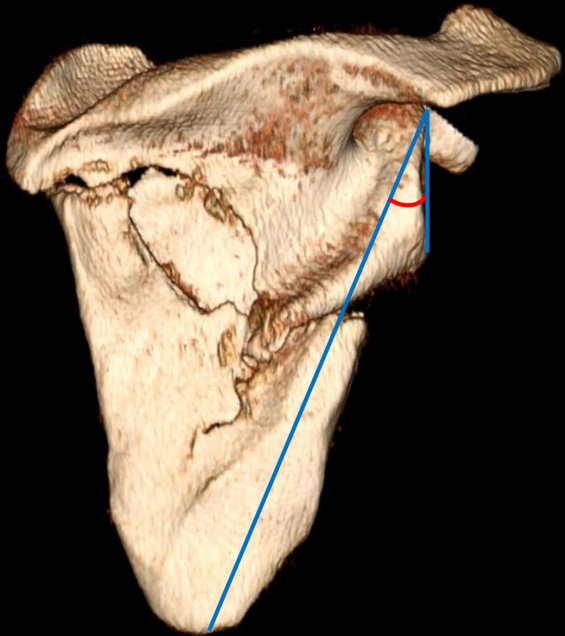
Articular: Instability



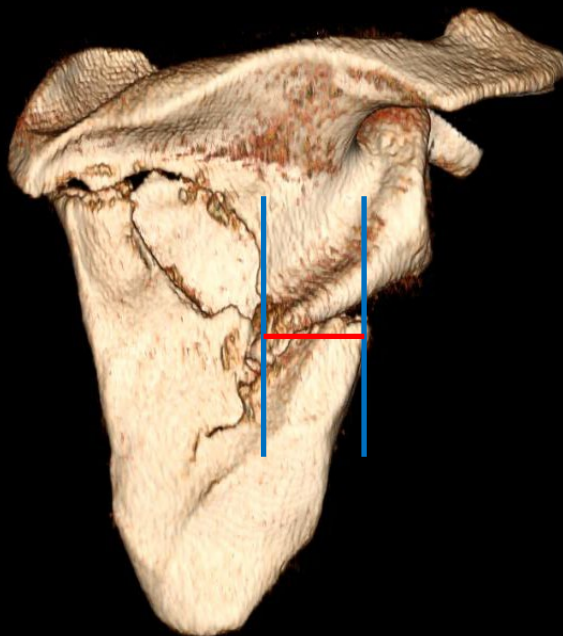
Glenopolar angle

Lateral border offset

Body Angulation



<22°

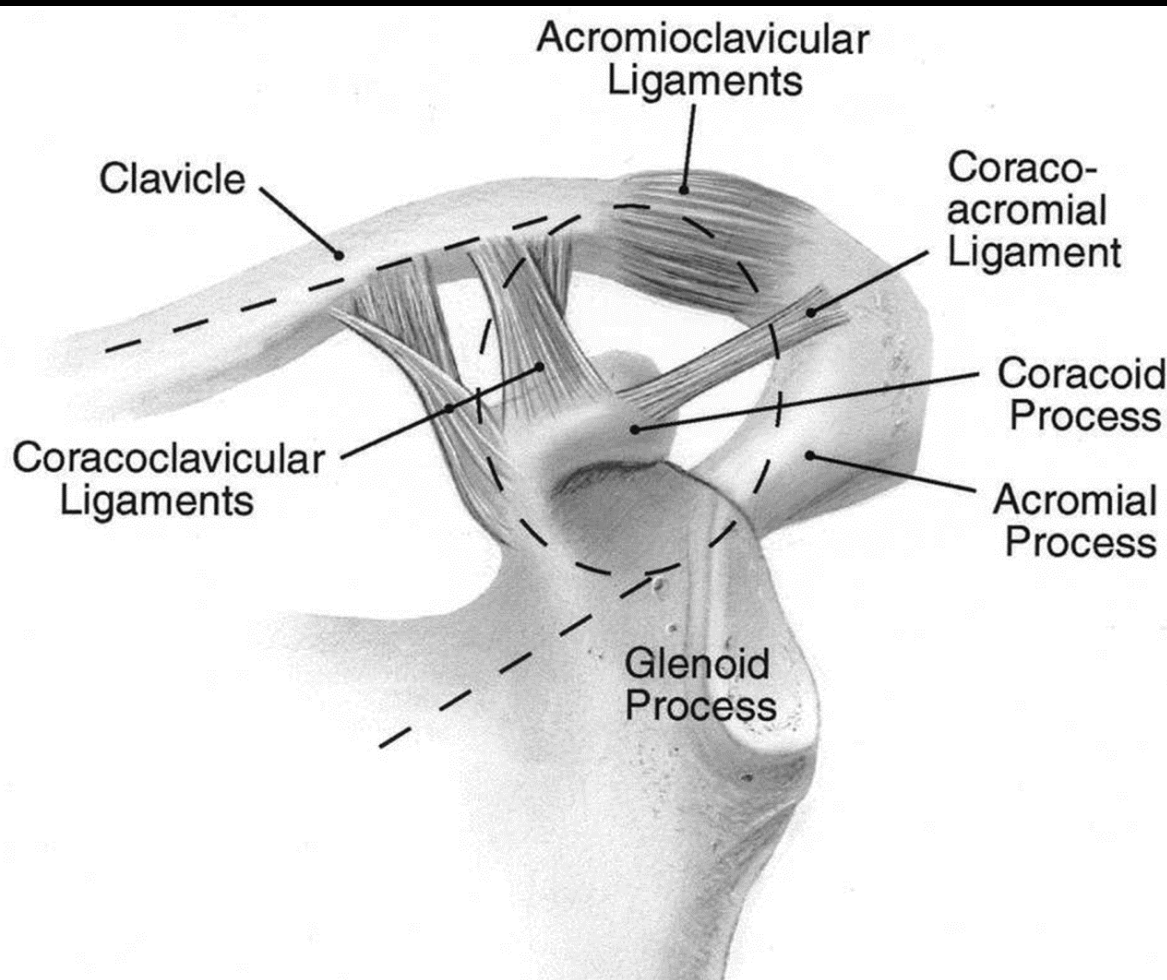


<2cm



>45°

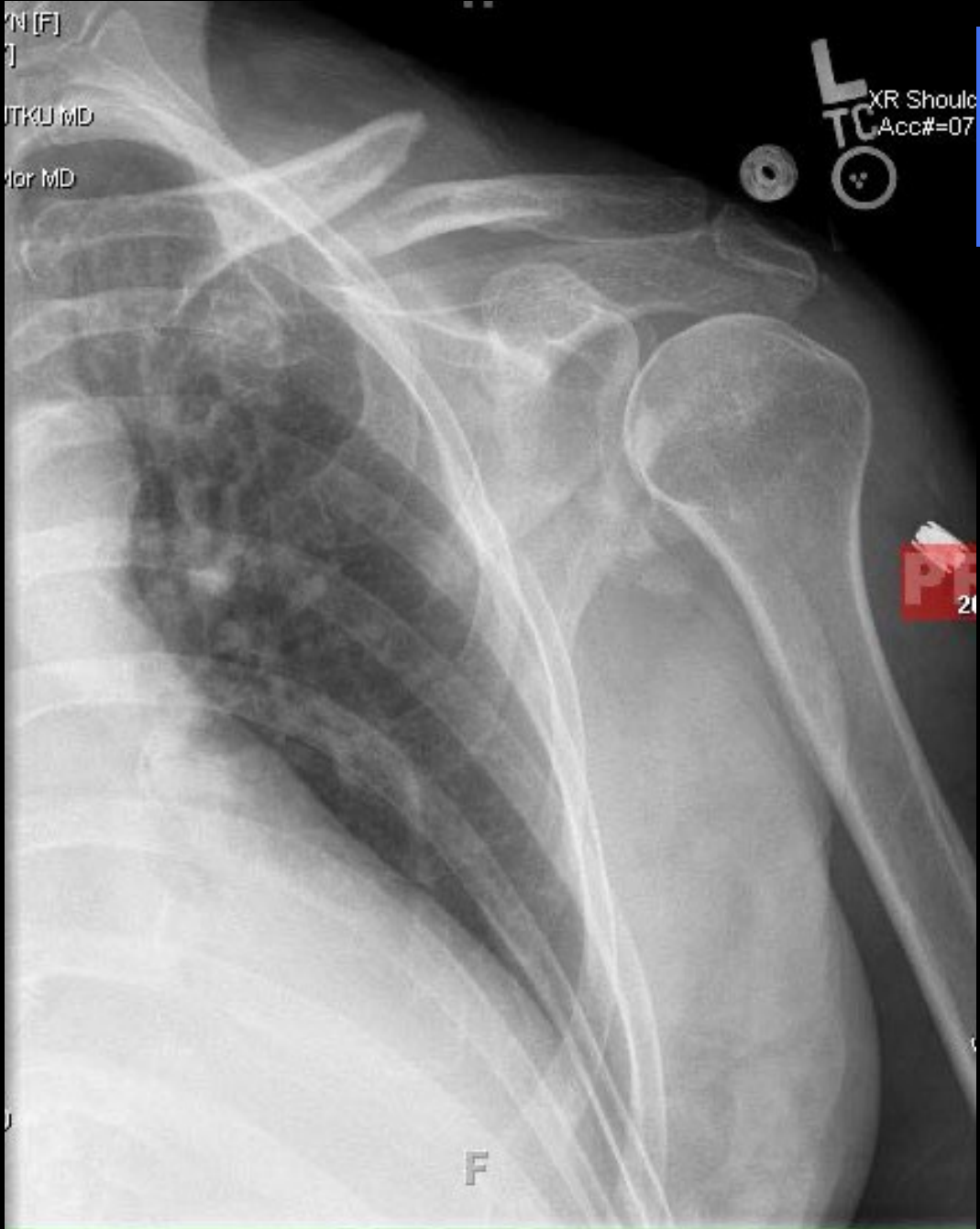
Superior Shoulder Suspensory Complex: “Floating Shoulder”



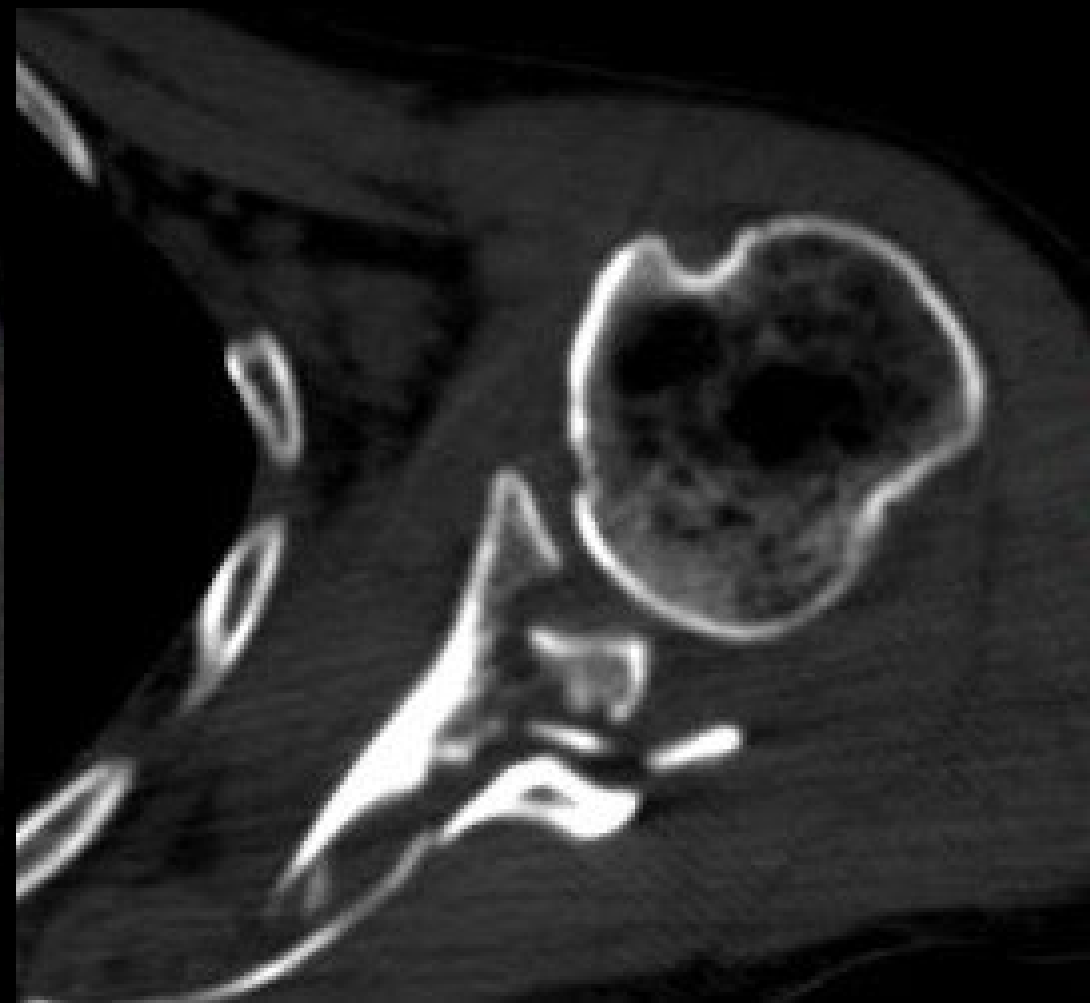
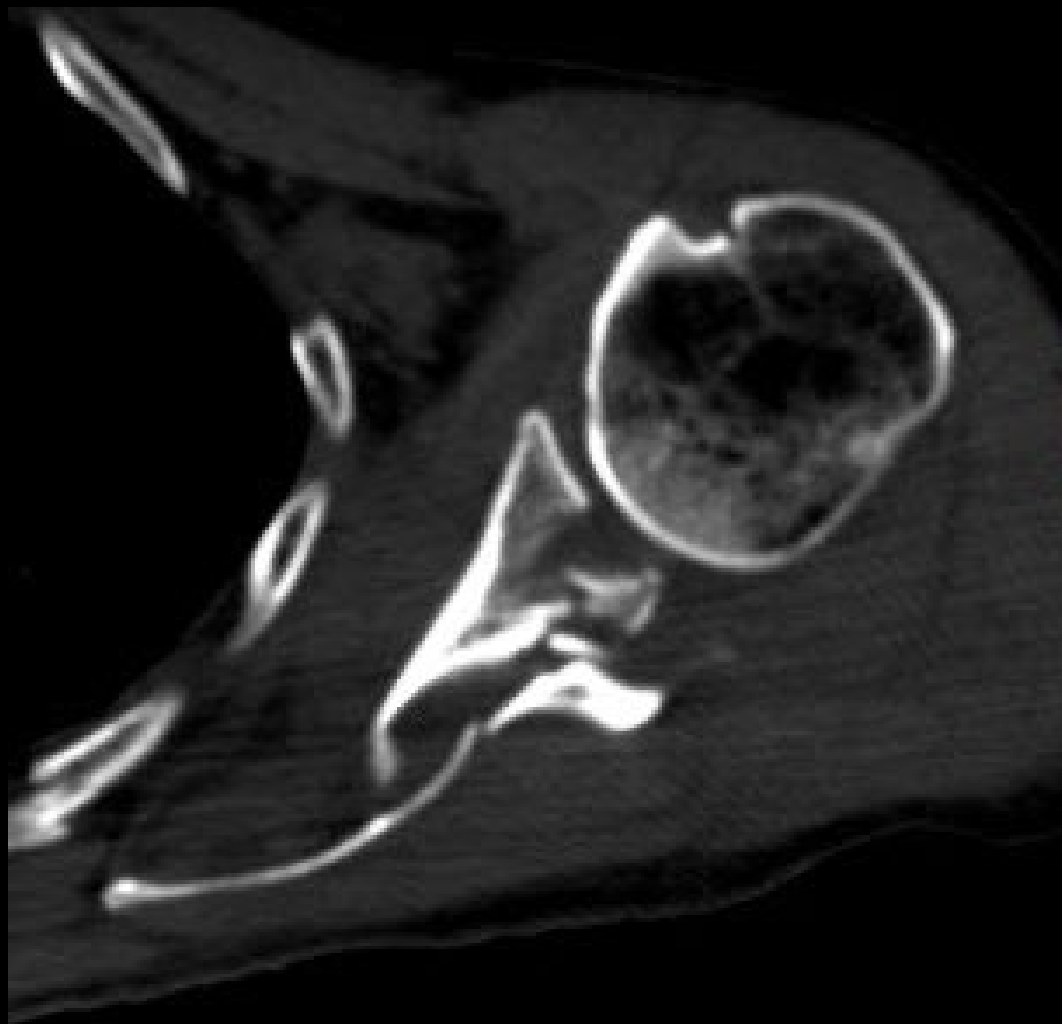
Posterior Approach

KB

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

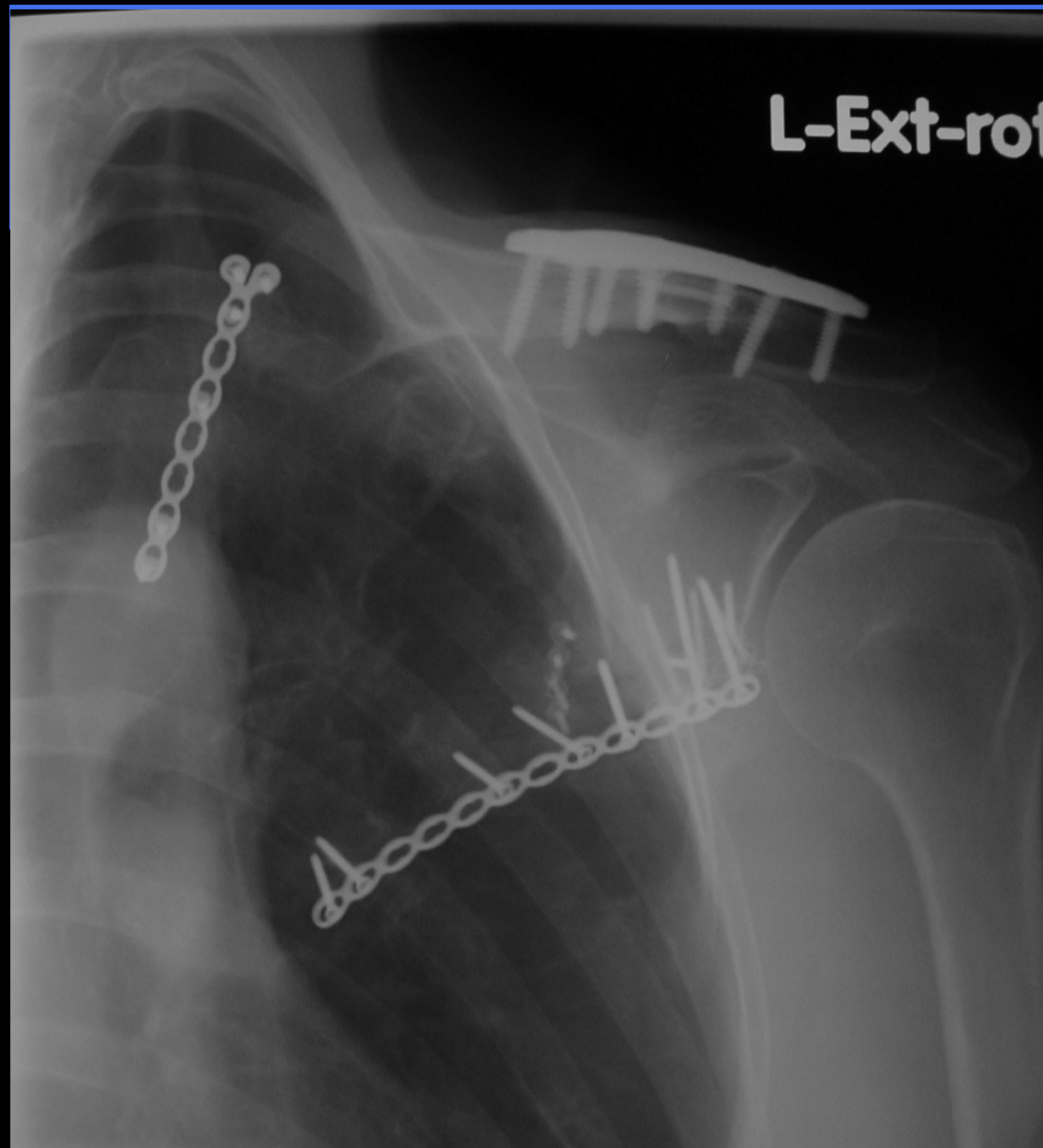


62 yo



MD





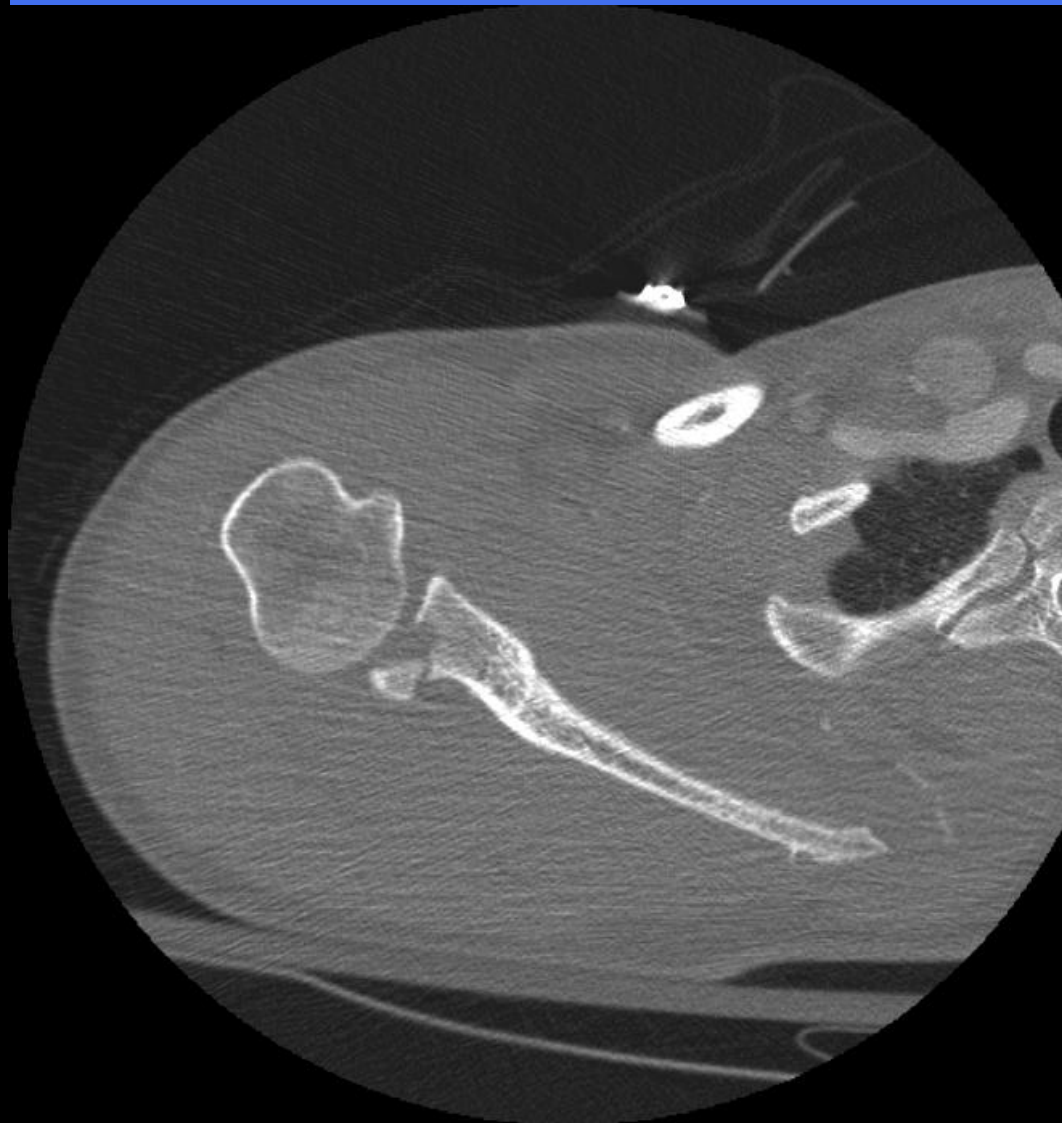
4.5 months postop



IM

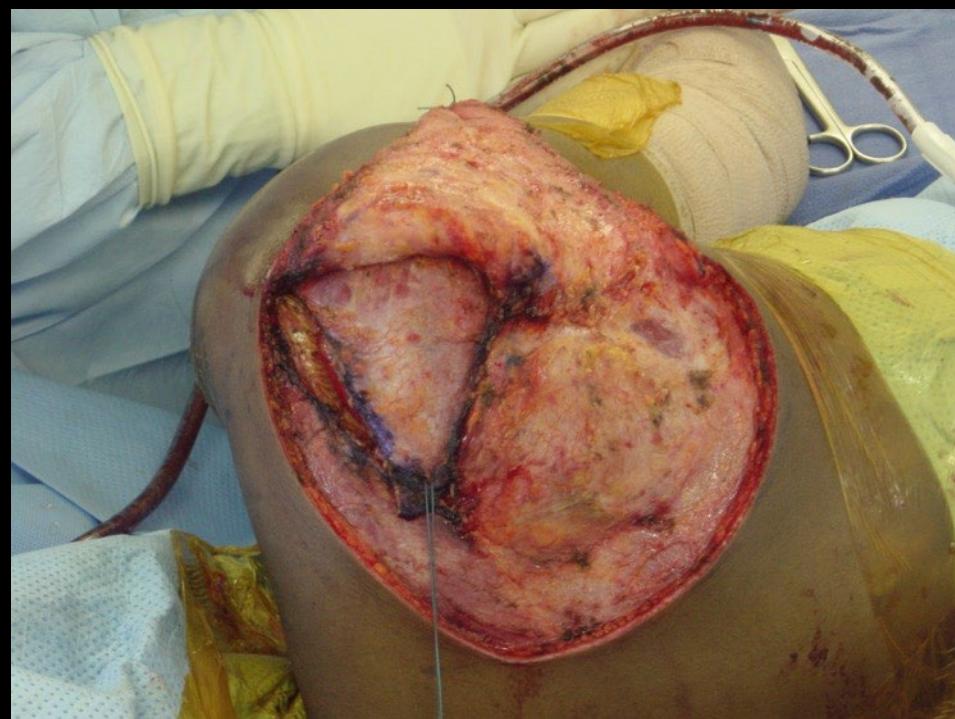
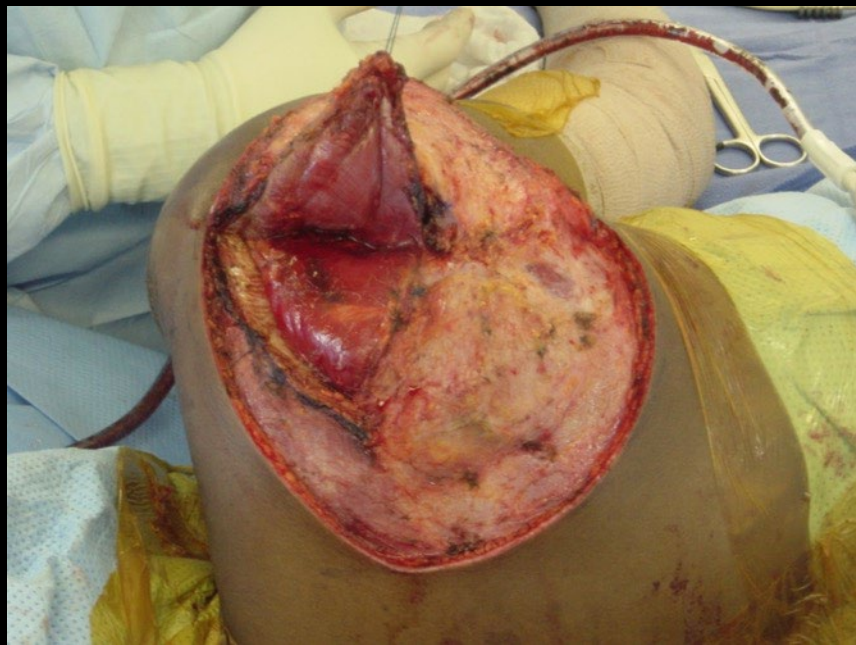
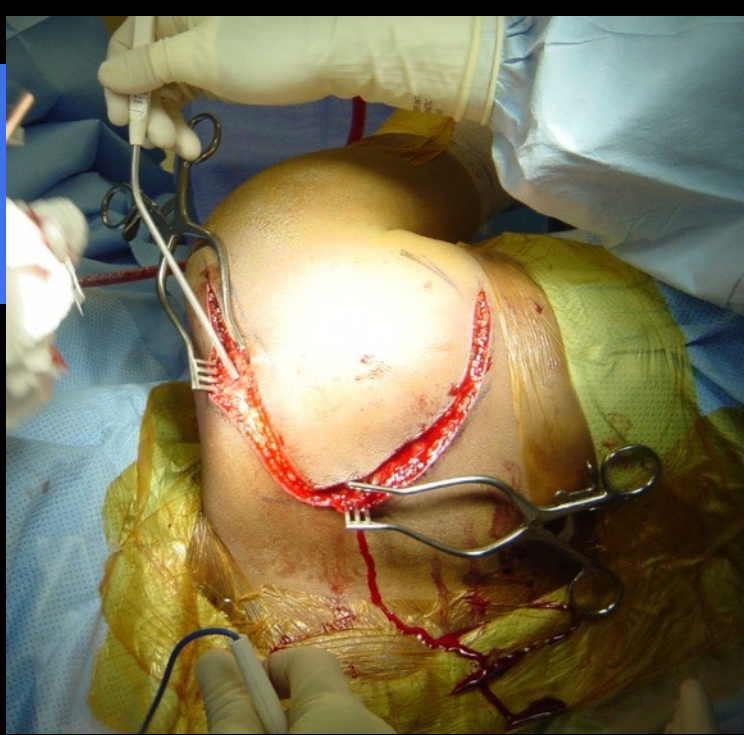
- 30 y/o, hairstylist, RHD
- s/p MCA
- c/o R shoulder pain, isolated injury
- Distally NV WNL

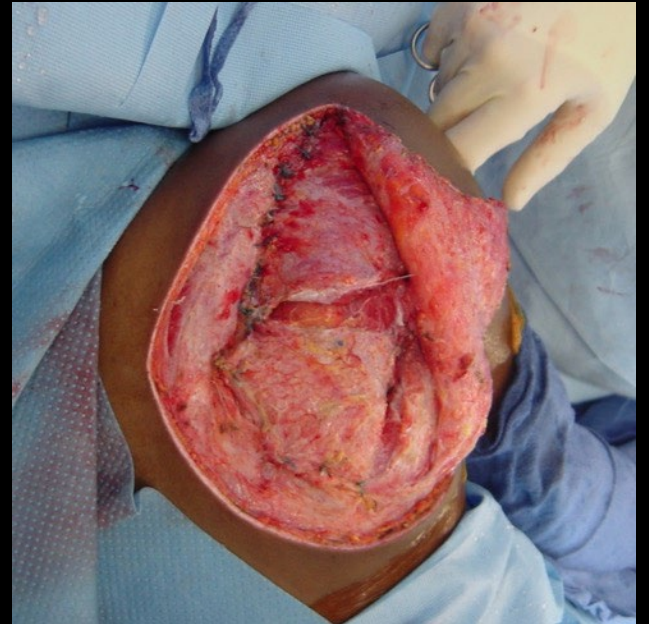
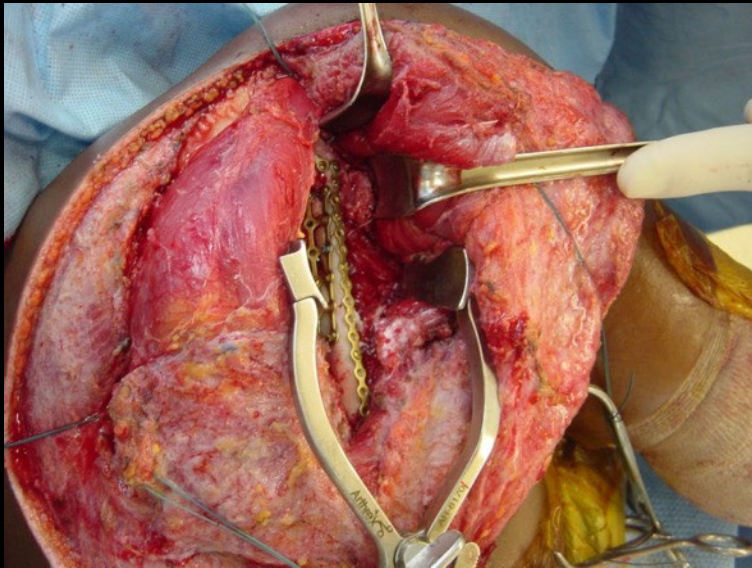
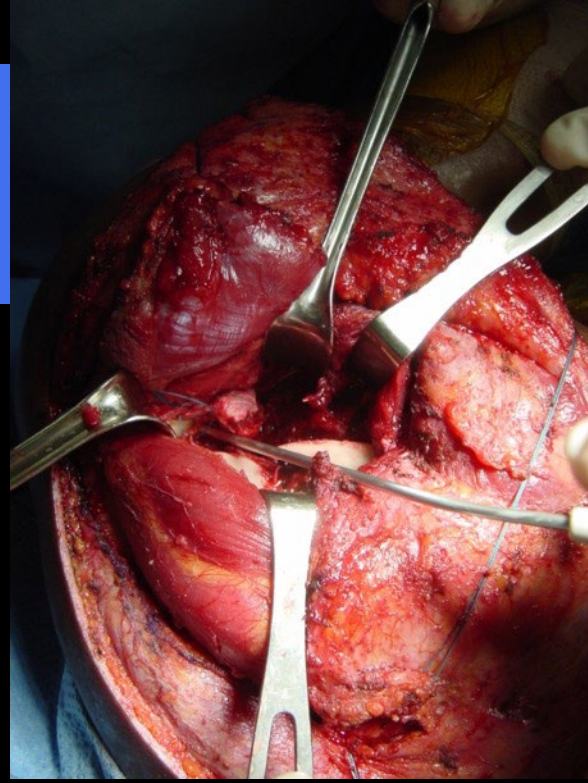


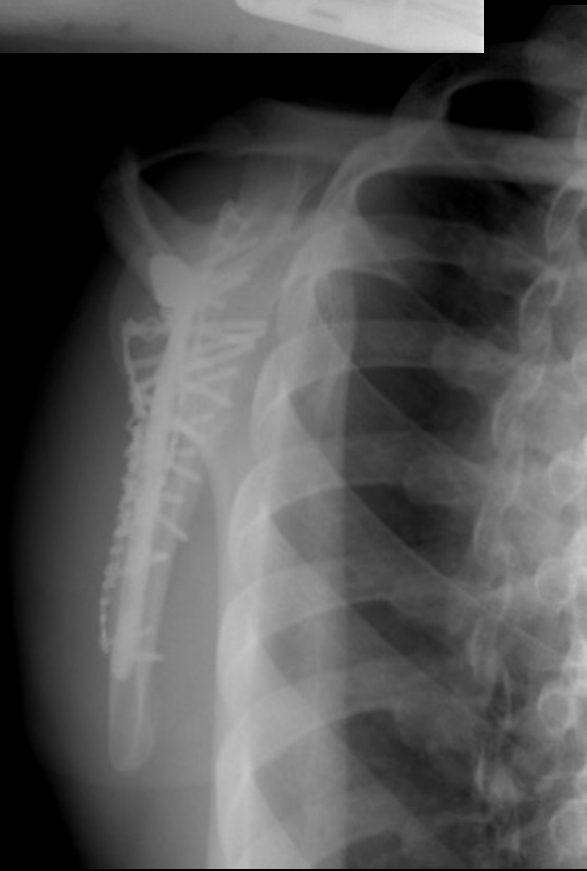
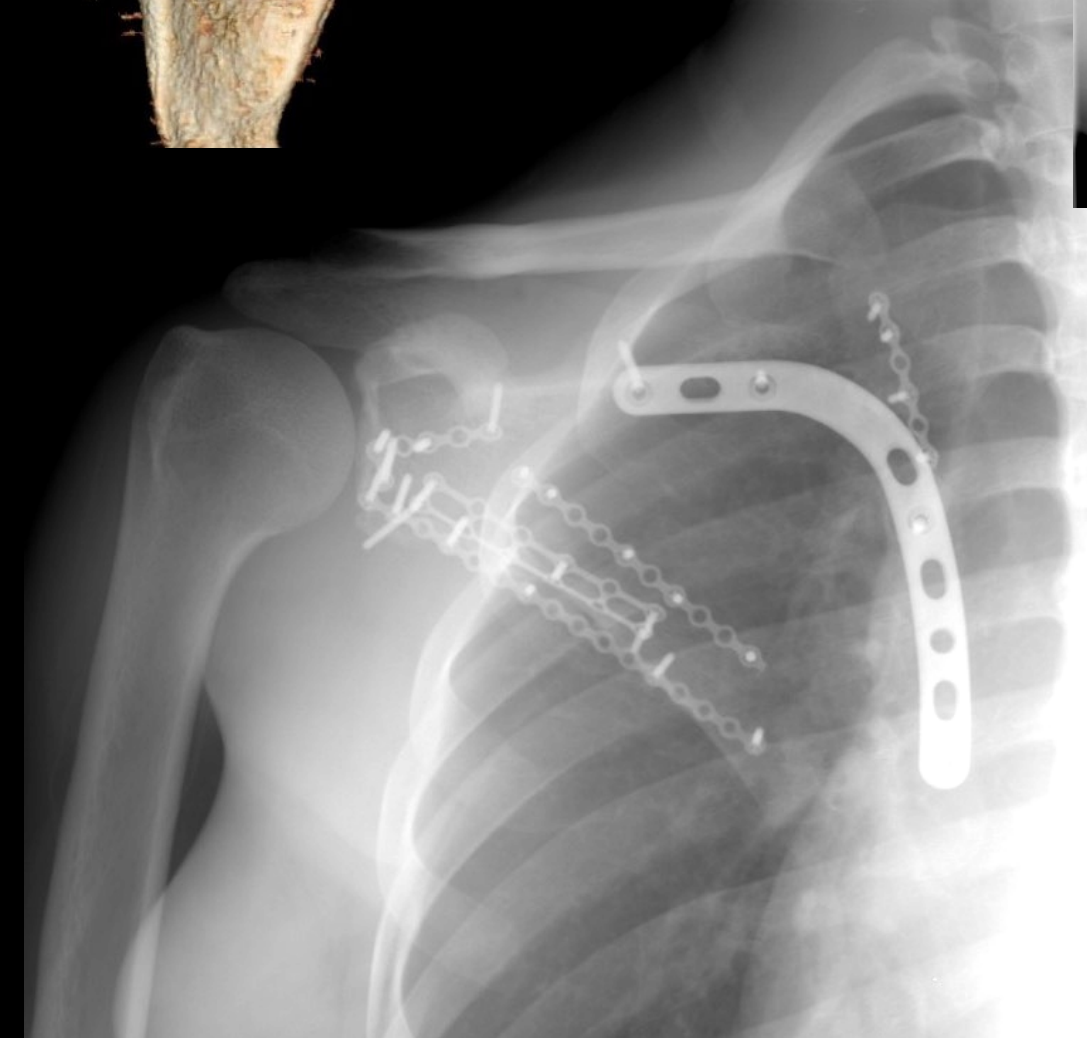
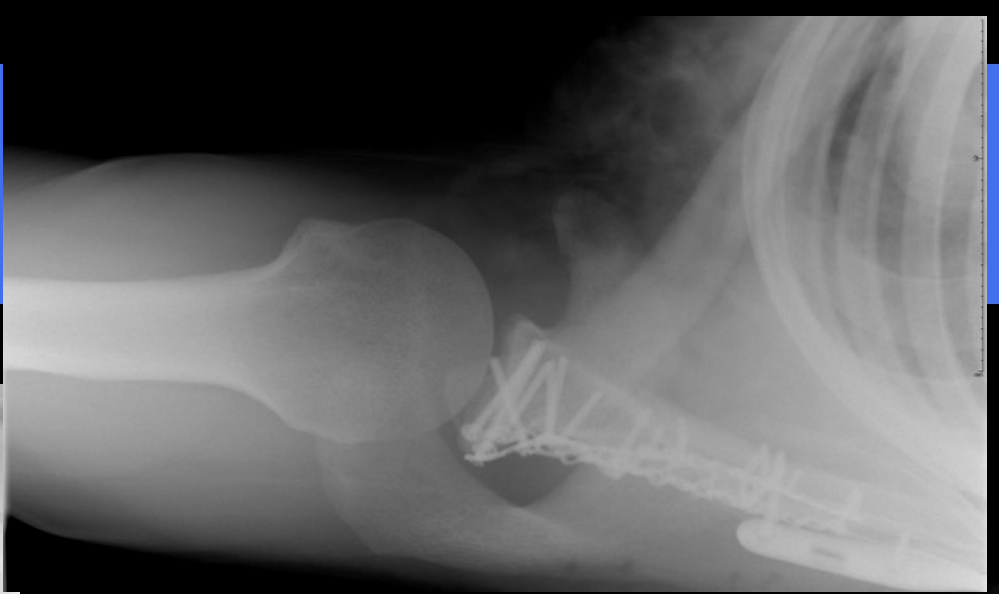












3 months follow up

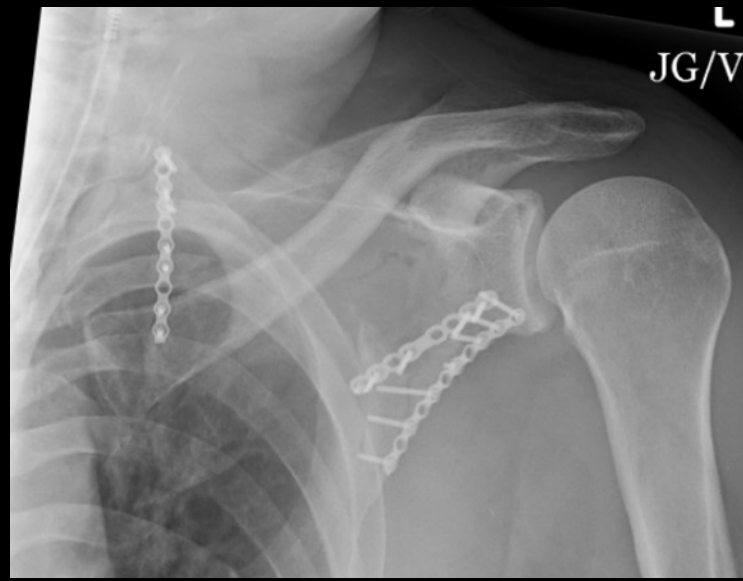
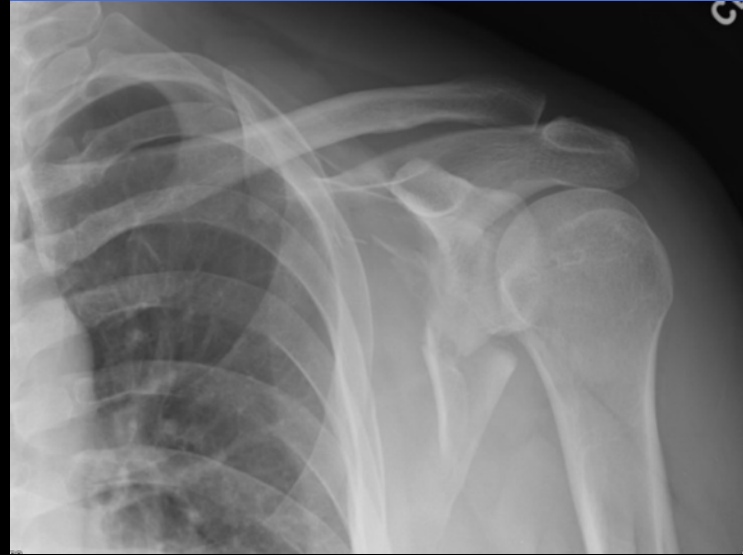


3 months follow up



Limited Posterior Approach

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

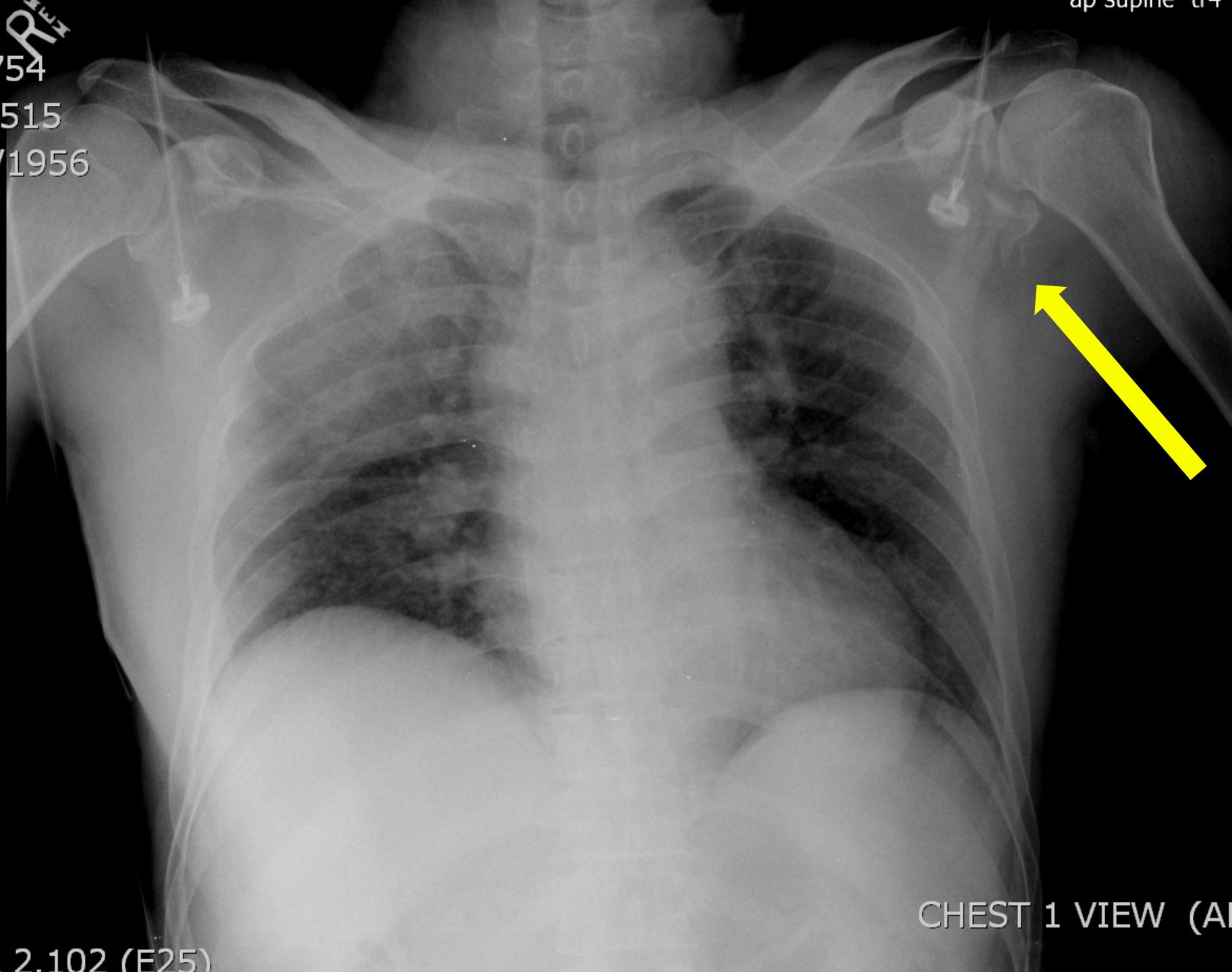


Deltopectoral Approach

PY

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

754
515
/1956



CHEST 1 VIEW (AI)

2.102 (E25)





Nb Views: 4

Rotation: 7

TND/+

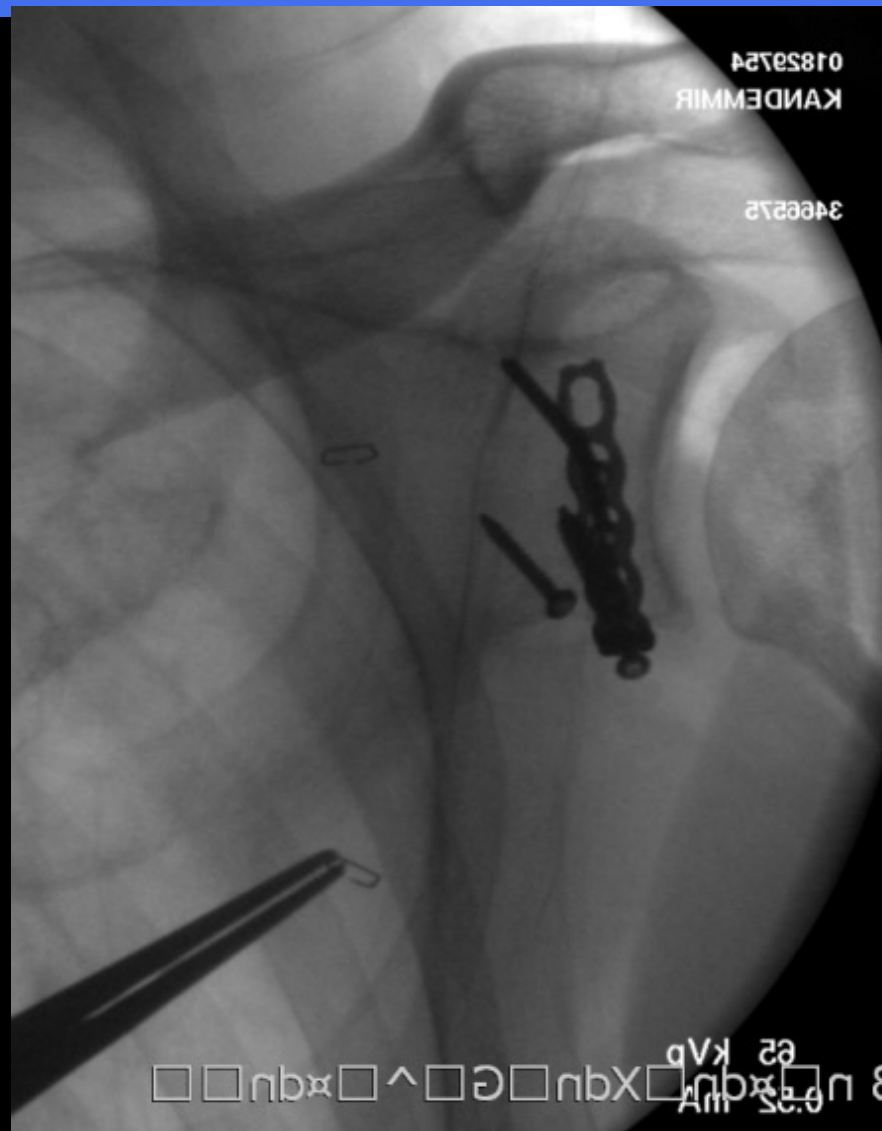


0.4mm/2
dspl

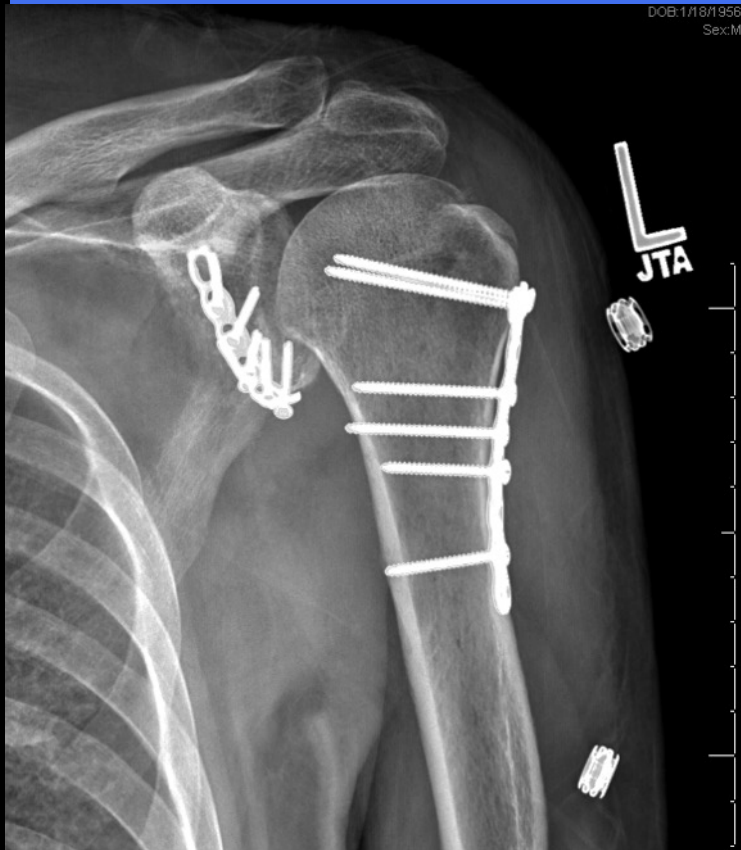




Deltopectoral Approach



56 yo, Deltopectoral Approach



56 yo, Deltopectoral Approach



56 yo, Deltopectoral Approach



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□ BODY:

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- 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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