



Prox Humerus Fxs in Elderly Replacement is Preferable!

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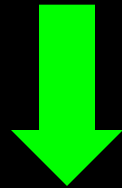
University of California, San Francisco



Displaced Unstable Proximal Humerus Fxs in Elderly (>65 yo)

▣ My Practice

Unstable Displaced fx in a patient who can self care



OPERATIVE TREATMENT

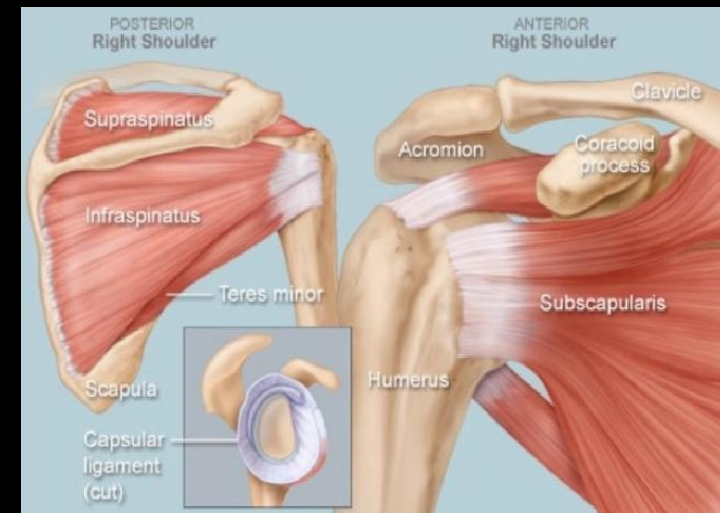
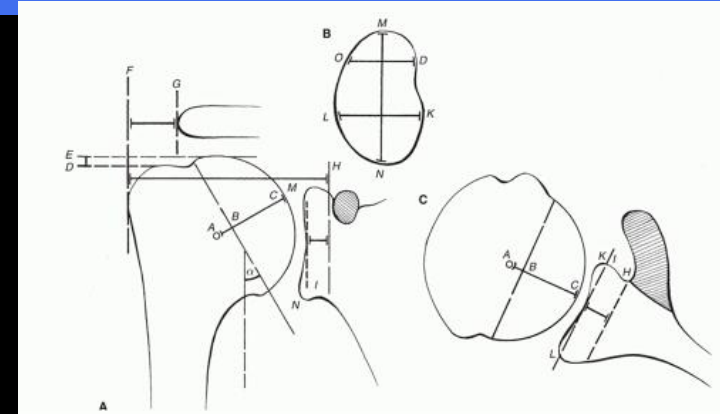


Displaced Unstable Proximal Humerus Fxs in Elderly (>65 yo)

- **ORIF** with augmentation (sutures, bone void filler ± fibular shaft)
 - 65 -75 yo
- **rTSA**
 - Tuberosities not repairable, Fx Dx
 - > 65 with comorbidity
 - >75 yo

Treatment Goal

- ❑ Restore FUNCTION !
- ❑ Function follows the Anatomy
- ❑ Obtaining & Maintaining Anatomic REDUCTION (stable fixation)
- ❑ Allow early progressive ROM



Elderly Patient: *Questions*



□ #1: Nonop vs Operative



□ #2: Fixation vs rTSA



Treatment: Nonop vs Op

❑ *DISPLACEMENT/STABILITY*

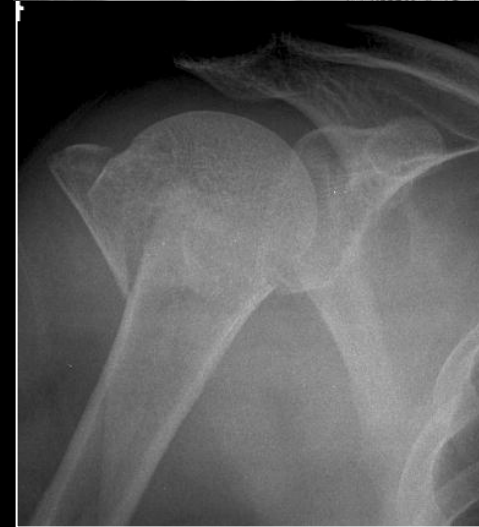
❑ NONOPERATIVE

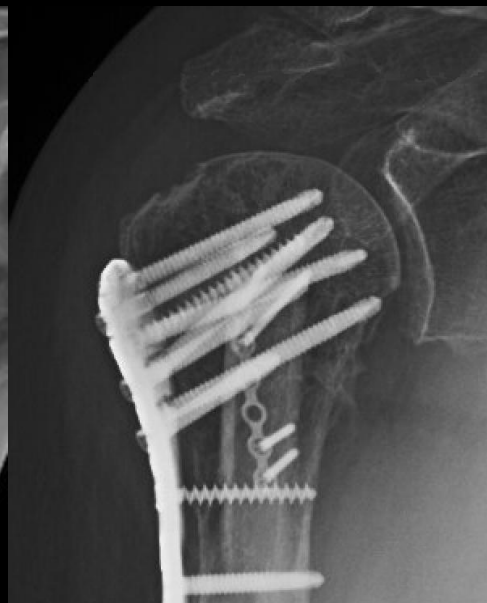
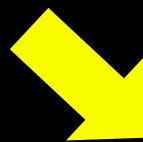
- Mild/no Displacement,
- Cannot self-care

~~Elderly: > 65 y/o ????????~~

❑ OPERATIVE

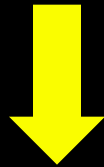
- Displaced Unstable Fx





Displaced Unstable Fx: NONOP vs OPERATIVE

Nonoperative Tx of Unstable
Displaced Fx



Malunion (Nonunion)



LOSS of FUNCTION

Loss of Motion, Pain, Weakness



Displaced Unstable Fx: Nonop ->Malunion/Nonunion

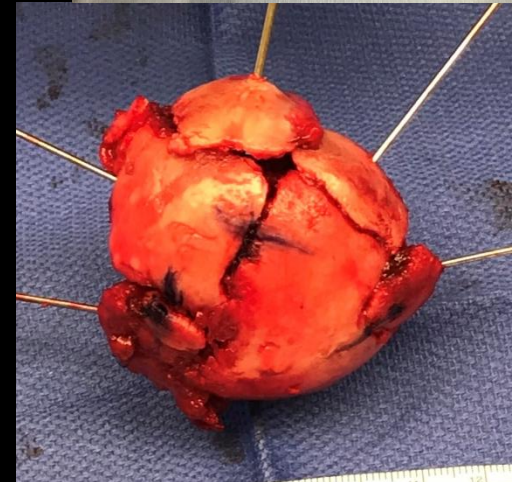


MM, 68 y/o female, Treated with surgery



Arthroplasty

- When fixation – *stable to allow early progressive ROM* – NOT possible
 - Fx pattern, Bone quality
 - >75 y/o, >65 y/o with comorbidity
- Arthroplasty not easy technically and high risk for dx

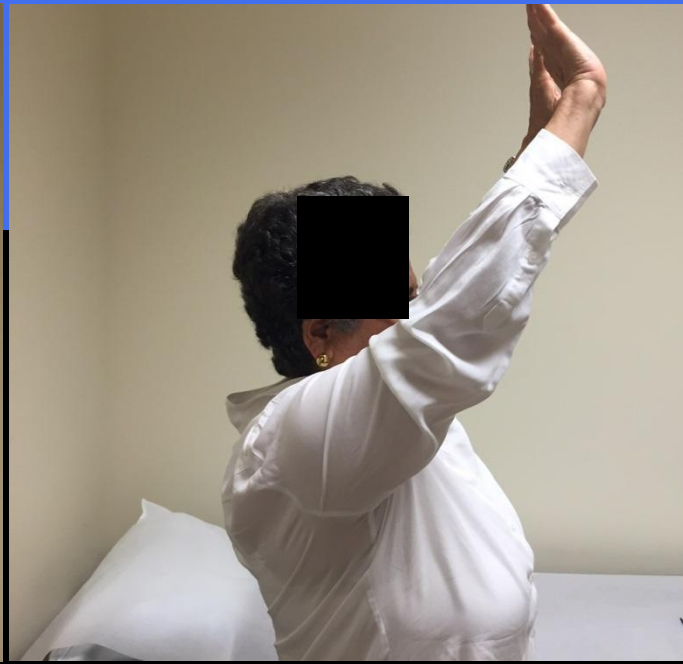


Reverse shoulder arthroplasty for complex fractures of the proximal humerus in elderly patients: impact on the level of independency, early function, and pain medication

- Prospective study, 33 patients
- >70 yrs
- Leaving @ home/retirement home
- @1 yr: 91% return to same functional level
- @1yr: 97% no additional analgesics

76 y/o, DM





ORIF vs rTSA- rTSA timing

Acute reverse total shoulder arthroplasty versus internal fixation for 3- and 4- part proximal humerus fractures: A propensity matched analysis of 5466 elderly patients

Conclusion: While both ORIF and RSA have been shown to be acceptable techniques for managing PHFs in the elderly, ORIF had a significantly higher re-operation and hospital readmission rate at mid- and long-term follow up. Additionally, a large portion of patients undergoing re-operation following ORIF were converted to shoulder arthroplasty although acute RSA has superior outcomes compared to delayed RSA. Therefore, for operative elderly candidates we advocate for the use of RSA in three- and four-part PHFs.

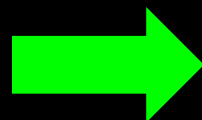
rTSA –Timing

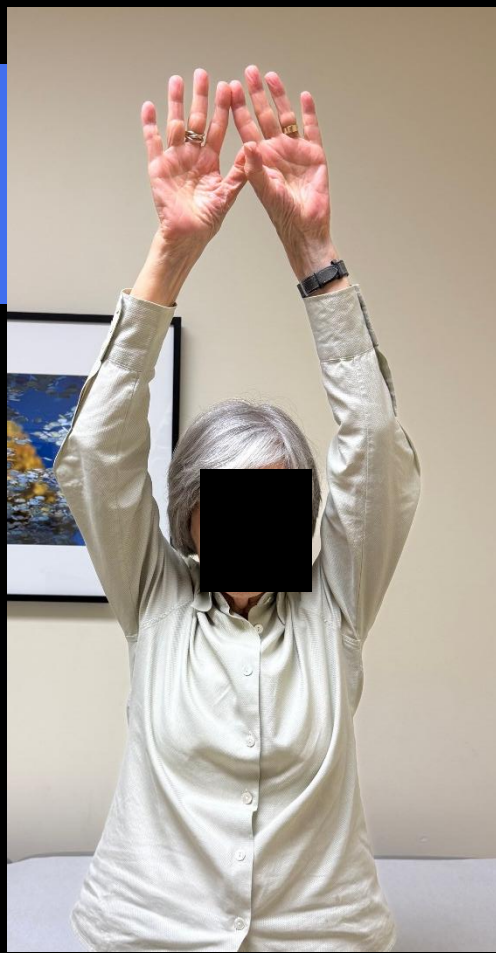
Immediate reverse shoulder arthroplasty demonstrates better outcomes than salvage reverse shoulder arthroplasty for proximal humerus fractures in the elderly: a meta-analysis

Conclusions

In elderly patients with PHFs, iRSA is associated with lower revision and complication rates, as well as statistically superior shoulder function and ROM, compared with sRSA. However, the

82 yo





rTSA - Repair of Tuberosities

Tuberosity healing after reverse shoulder arthroplasty for complex proximal humeral fractures in elderly patients—does it improve outcomes? A systematic review and meta-analysis

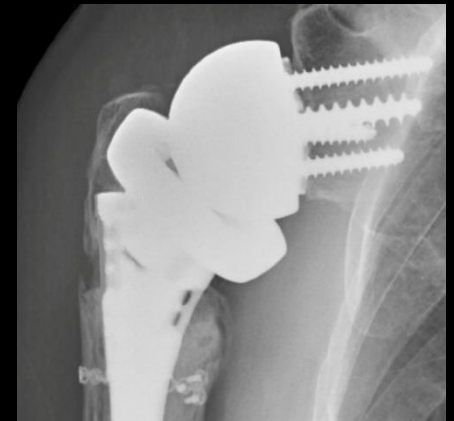
Jain N et al. JSES 2019

Tuberosity Management in Reverse Shoulder Arthroplasty for Proximal Humerus Fractures

Hachadorian et al. JAAOS 2026

rTSA - Repair of Tuberosities

- ❑ CRITICAL
- ❑ ROM & Function better
- ❑ Risk of Dislocation lower

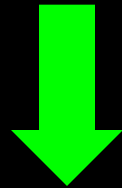


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THANK YOU



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