

Mini Open Technique for Elbow Contracture Release

Loukia K. Papatheodorou, MD Dean G. Sotereanos, MD

Orthopaedic Specialists – UPMC , University of Pittsburgh, Pittsburgh, PA, USA

Objectives To evaluate outcome of a lateral column approach combined with a minimal posterior triceps splitting approach for elbow contracture release

Methods

43 elbow contractures

26 Posttraumatic & **17** OA

F: 9, M: 34 mean age: 38 yrs (19 - 58y)

minimal posterior approach

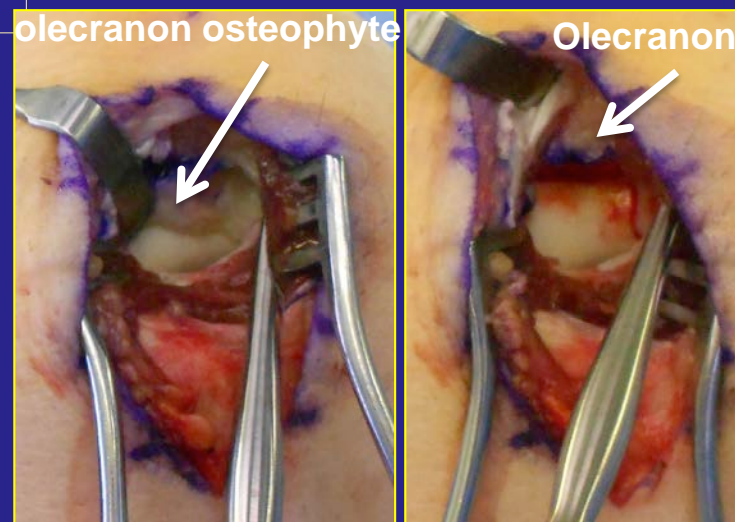
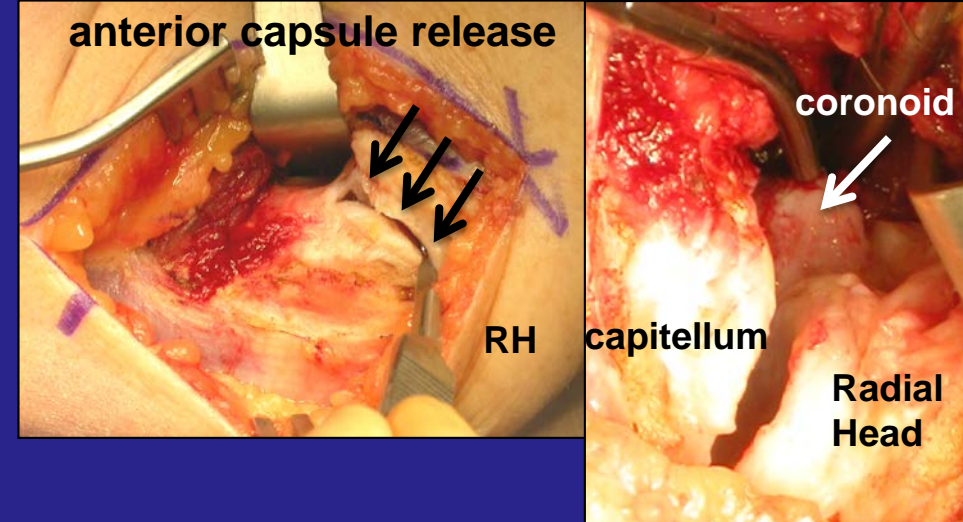
posterior triceps splitting incision:

- posterior capsule release
- posterior olecranon osteophyte excision
- loose bodies removal

“lateral column approach”

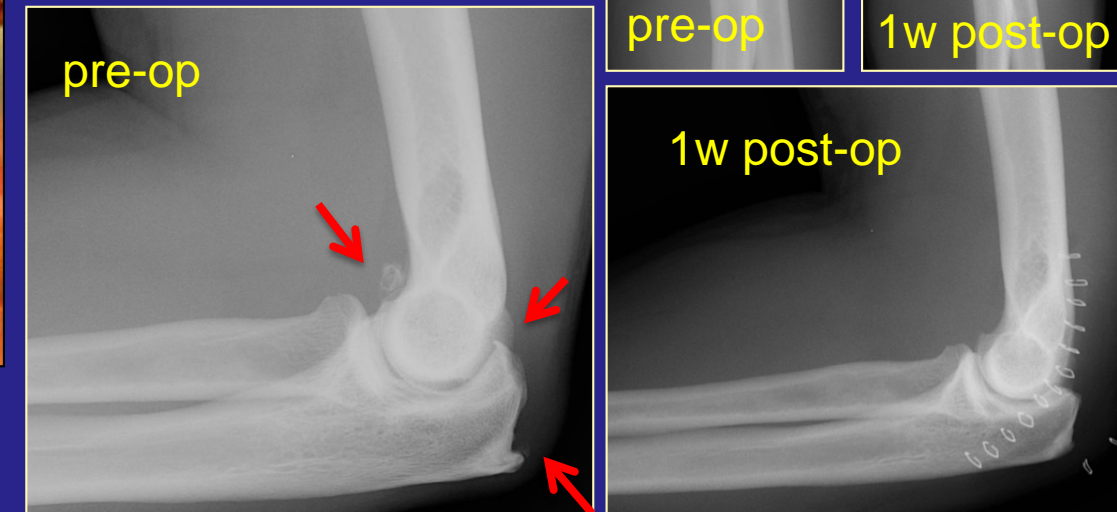
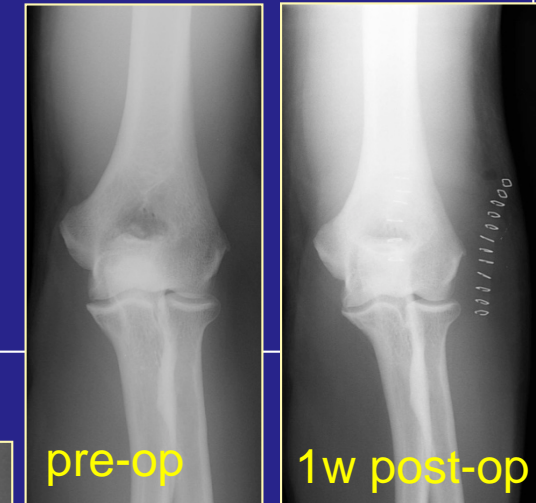
limited Kocher:

- anterior capsule release
- coronoid osteophyte excision
- loose bodies removal



Results mean F-up: 41 mo (24-58 mo)

- **all** patients achieved functional ROM
- a mean gain of **59°** in the flexion extension arc
- pts maintained 94% of the motion that was achieved intraoperatively
- **no** patient lost motion
- **no** triceps weakness
- **no** elbow instability



Conclusions open elbow contracture release using the “lateral column approach” combined with a minimal posterior approach is a **safe & effective** technique

It provides a **safe and simple alternative** for the treatment of the difficult contracted elbow

