




What's New in Internal Fixation for Distal Humeral Fractures

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Disclosure

- Studies supported by:
 - OTA, COA, ASES
 - Zimmer Inc.
 - Stryker, Olympus Biotech, AO
- I am a consultant for Stryker, Acumed, Zimmer, ITS
- Receive royalties from Stryker (plates), LWW, Springer (publishers)

Current Issues

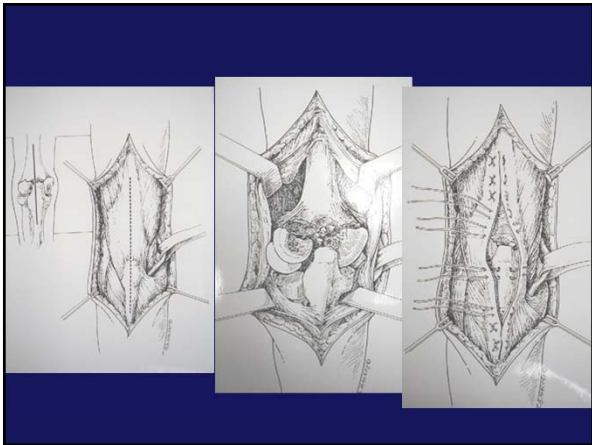
- Surgical approach
- Role of Arthroplasty
- Type, configuration of plates
- Ulnar nerve management











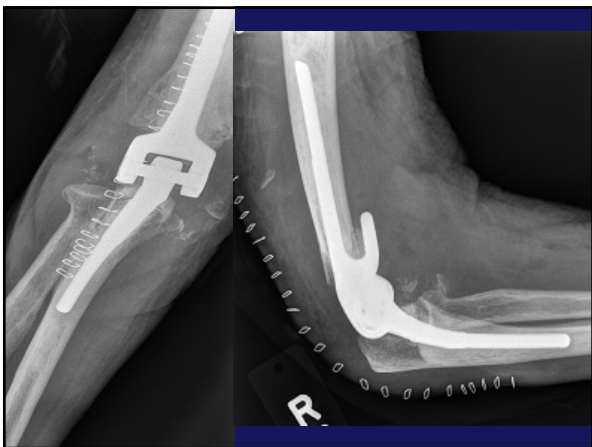


A RCT of ORIF vs TEA for displaced intra-articular distal humeral fractures in the elderly

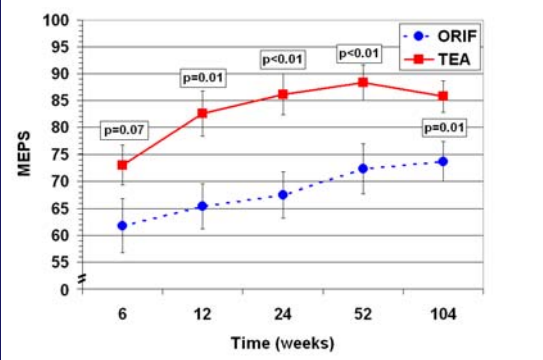
Christian JH Veillette, MD, FRCS(C),
Michael D. McKee, MD, FRCS(C)
and the Canadian Orthopaedic Trauma Society

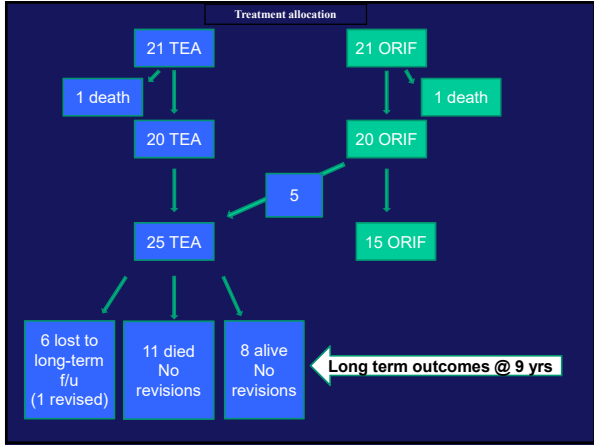


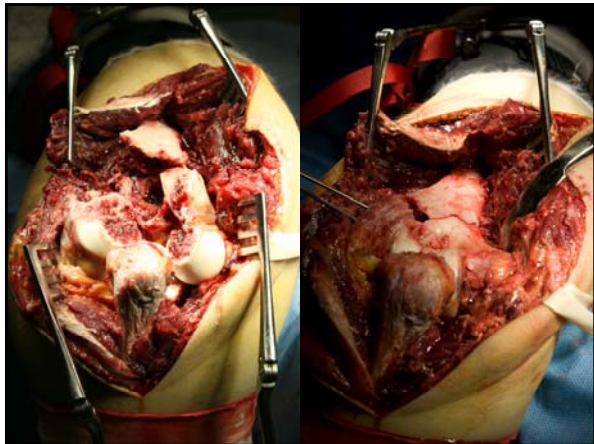


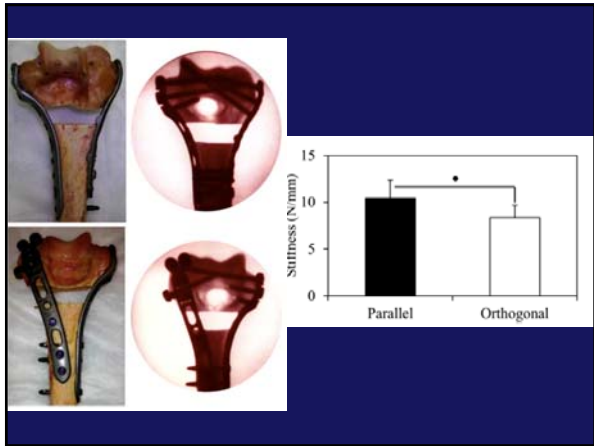


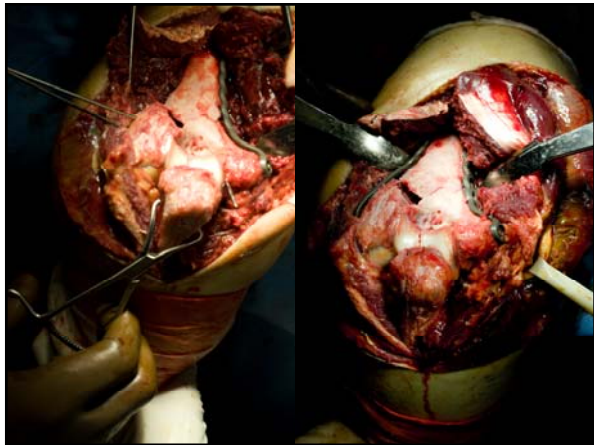
Mayo Elbow Performance Score














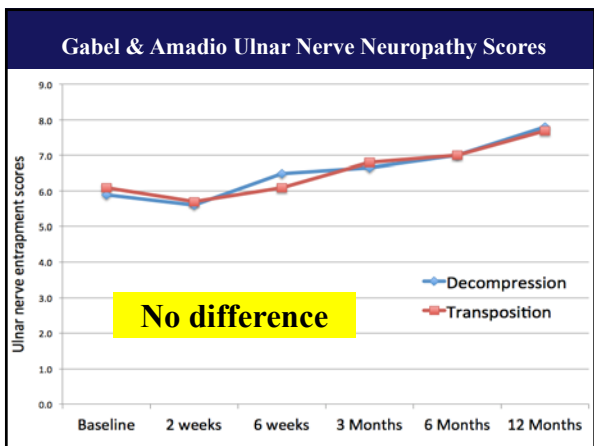
What to do with the ulnar nerve?

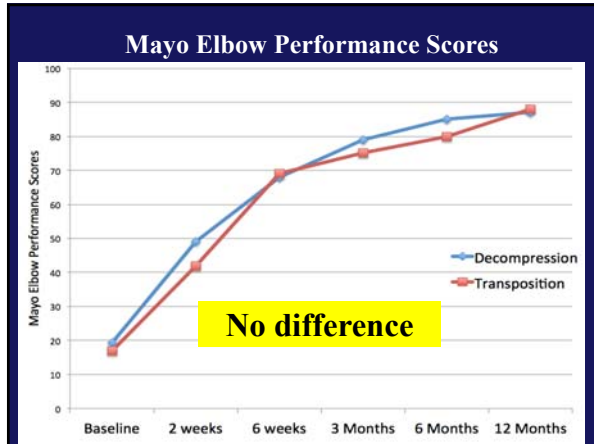
- Transpose?
- Leave in situ?



Results: RCT 2017

- 31 Randomized to simple decompression
- 27 Randomized to decompression + anterior transposition
- Mean age 52 years (17-79 years), 60% female
- No difference between the two groups with regards to age, gender, BMI, smoking, diabetes, injury characteristics, pre-operative neurologic dysfunction, time to operation, length of operation, or surgical approach.





- ### Conclusions
- A triceps-splitting approach has some advantages, especially in open fractures
 - ORIF with medial and lateral column plates remains the treatment of choice for the majority
 - Semi-constrained TEA has a role in elderly, low-demand patients (pre-existing arthritis, severe comminution, etc)
 - Management of the ulnar nerve remains controversial – it must be isolated and protected, but final disposition remains unclear
