

Fractures of the Distal Humerus

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“Boot Camp”, 2016 OTA Annual Meeting
October 5, 2016
Washington DC

Functional Anatomy

Surgical Anatomy

Mechanism of Injury

Evaluation

Physical exam

Radiographic exam

- Anterior-posterior and lateral radiographs

- Traction views

- CT scan

OTA Classification

- 3 Main Types

 - Extra-articular fracture (13-AX)

 - Partial articular fracture (13-BX)

 - Complete articular fracture (13-CX)

Treatment Principles

- Anatomic articular reduction

- Stable internal fixation of the articular surface

- Restoration of articular axial alignment

- Stable internal fixation of the articular segment to the metaphysis and diaphysis

- Early range of motion of the elbow

Treatment: Open Fracture

Fixation

- Implants determined by fracture pattern

Other Potential Surgical Options

- Total elbow arthroplasty

- “Bag of bones” technique

Surgical exposures

- Paratricipital

- Extra-articular olecranon osteotomy

- Intra-articular olecranon osteotomy

Surgical Treatment Step by Step

- Lateral decubitus position (or prone)

- Arm hanging over a post

- Sterile tourniquet if desired

To transpose or not to transpose?

Outcomes

Complications

References