

Arthroscopic Approach of the Elbow

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A. Indication

1. Removal of loose bodies
2. Synovitis
3. O.D.
4. Capsular release
5. Debridement of osteophytes
6. Radial head excision
7. Assessment of instability
8. Intra-articular fracture

B. Patient position

1. Supine
2. Prone
3. Lateral decubitus
 - Both ant. & post.
 - Intraoperative manipulation
 - Conversion to open
 - Surgeon's preference

C. Patient position

1. Supine
 - 1) Advantage
 - (1) Access to the airway
 - (2) Excellent to Ant.
 - (3) Conceptualization of anatomy
 - (4) Convert to open
 - 2) Disadvantage
 - (1) Poor access to Post.

- (2) Difficult manipulation
- (3) Require an assistant & Unstable working base

2. Prone

1) Advantage

- (1) Improved access of Post.
- (2) Ease of manipulation
- (3) Gravity allows NV to displace anteriorly
- (4) No traction & Maintained in a stable position
- (5) Open possible

2) Disdvantage

- (1) Patient positioning
- (2) Anesthesia
- (3) Regional block
- (4) Ant. approach

3. Lateral decubitus

- 1) By O' Driscoll and Morrey
- 2) Advantages of both the prone and supine

D. Portal

- 1. Proximal medial & Anteromedial
- 2. Proximal lateral & Anterolateral
- 3. Midlateral
- 4. Posterolateral
- 5. Straight posterior

E. History

- 1. Radial head fracture
- 2. Prior ulnar nerve transposition
- 3. Ulnar nerve subluxation
- 4. Other surgery

R. Surgical technique

- 1. 4 mm 30 degrees sometimes 2.7 mm
- 2. tourniquet
- 3. forearm and hand wrapping

4. surface landmark drawn
5. Midlateral portal

G-1. Surgical technique

See Video!!

1. ant. structure starting from prox. med. portal
2. post. structure starting from post. lat. Portal
3. Close monitoring of soft-tissue distention

G-2. Surgical technique

1. None of nerves surrounding the elbow is immune from injury during arthroscopic surgery.
2. Elbow joint insufflation with the elbow in flexion increases the distance between the distal humerus and the radial and median nerves, but does not increase the distance between the capsule and the nerves.

H. Summary

- Injury to the neurovascular structures can be minimized
- Incising the skin only
- Using blunt dissection and blunt trocars
- Distending the joint
- Placing the anterior portals in a more proximal position
- With more innovation in instrument and technique, elbow arthroscopy will continue to evolve and new indications will emerge. We use the prone position during 10 years and a through knowledge of regional anatomy, use of meticulous surgical technique will allow the use of arthroscopy to treat a variety of elbow disorders in a safe and effective manner.