Elbow Arthroscopy
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Disclosure
Nothing to Disclose relative to this Presentation
Except.....

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Indications

1. Rheumatoid OA
2. Osteoarthritis
3. Hemophilic Arthritis
4. Septic Elbow
5. Select Fractures/Instabilities
6. OCD lesions
7. Loose bodies
8. Contracture release
9. Tennis Elbow

Contraindications Elbow ATS

Potential from Neurovascular injury
- NV Proximity to working portals
- Prior Ulnar Nerve transposition
- Widespread OA
- ? Prior Elbow surgery
- ? Subluxing Ulnar Nerve

Anesthesia

• General preferred – provides total muscle relaxation

• Regional anesthesia
  • Less preferred
  • Patients postoperative neurologic status difficult to assess
Instrumentation

- **Standard 4.0-mm, 30° arthroscope**
  - Smaller 2.7-mm scope can be used for small spaces (adolescents)
  - 70° scope can be used in some situations

- **Side vented in-flow cannula avoided**
  - Distance btw skin and joint capsule slight
  - Want to prevent fluid extravasation

Instrumentation

- **Trocars – Conical/Blunt**

  - Variety of equipment:
    - Hand-held instruments
    - Small shaver
      - Try not to use suction (Negative pressure)
    - Ablator???
    - Swishing Stick !!!

Patient Position

- **4 ways**
  1. Supine
  2. Supine-suspended
  3. Prone
  4. Lateral Decubitus

  I Prefer Lateral Decubitus
  - Exposure is good (posterior)
  - Good airway access
Patient Position
• Beanbag, Axillary Roll
• Arm Holder
• Shoulder abducted to 90°
• Elbow at 90°
• Tourniquet 250 mm Hg
• Bony landmarks identified before joint distention

Portals – Workhorse
Anterior Lateral
• Just anterior to Radiocapitellar Joint
• More Proximal = Greater Safety (PIN)

Portals – Workhorse
Anterior Medial
• 1-2 cm Anterior and 1-2 cm Distal to ME
• Traverses Flexor pronator mass - safe
Portals – OCD lesions

**Soft Spot**

**Direct Ulnar (3-4 cm distal to RC joint)**

**Direct Posterior** (2-3 cm above olecranon)

**Posterior Lateral**

- Created after Direct Posterior

Complications

**Joint infection**

- Low
- Use sutures; not steri strips
  - Synovial fistula

**Heterotrophic Ossification**

- Reported but low
Complications

Neurovascular
• Ulnar Nerve
• Superficial Radial Nerve, PIN, AIN, MABC
• Higher in Rheumatoid patients
  • Thinned or Absent Capsule

RISK of Neurovascular Injury
Cannot be entirely Eliminated!

Elbow Arthroscopy for Lateral Epicondylitis
Elbow Arthroscopy for Lateral Epicondylitis

• Surgical Treatment is directed at releasing ECRB insertion

• ECRB Origin
  • Just beneath the distal-most tip of the lateral supracondylar ridge
  • Diamond shaped footprint
  • Approx. 13 mm by 7 mm

Setup – takes longer than procedure

Lateral Decubitus with Bean bag

Landmarks

Insufflated Elbow joint – Soft Spot
• 25-30
**Medial side**

- Start Prox Anterior Medial Portal
- Lift ulnar Nerve upwards
- 15 Blade
- Blunt Trochar
- Non side flow inflow portal

**Lateral**

- Look Lateral
- Outside in Technique

**Lateral**

- Capsular Release
- Ablator Along Capatellum
  - Stay ½ the depth of the Radial Head (LCL)
Elbow Arthroscopy for Lateral Epicondylitis

Release ECRB off Capitellum after Capsular release

Thank you!