Wrist Arthroscopy
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Outline
- Background
- What pathology can be addressed?
- Set-up
- Portal Anatomy
- Diagnostic Arthroscopy
- Case Examples
- Complications
- Conclusions

Background: Why Do Wrist Arthroscopy?
- Less invasive/minimize scarring
Background: Why Do Wrist Arthroscopy?

- Less invasive/minimize scarring
- You can see better

You can see better

You Can See better
**Arthroscopy vs. MRI**

- MRI, decreased *sensitivity*: TFCC, SL, LT, etc.
- Arthroscopy: Gold Standard

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**What pathology can be addressed?**

- *Ligament tears*: SL, LT, etc.
- *Arthritis*: Radiocarpal, Midcarpal, CMC
- *Ganglions*
- *Chondral defects*
- *TFCC tears*
- *Synovitis*
- *Fractures*: Distal Radius, Scaphoid, etc.

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**Arthroscopy vs. MRI**

- MRI, *poor sensitivity*: TFCC, SL, LT, etc.
- Arthroscopy: Gold Standard

****Persistent wrist pain without findings on X-ray or MRI, diagnostic wrist arthroscopy can be considered

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**Pre-op Evaluation of patient**

- Surgeon may identify anatomic abnormalities
- Difficult to differentiate b/w ax degenerative findings and pathologic findings → wrist pain

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Pre-op Evaluation of patient

- Surgeon may identify anatomic abnormalities

- Difficult to differentiate b/w ax degenerative findings and pathologic findings → wrist pain

***Preoperative H+P are critical!!!

Basic equipment

- 15 blade
- 22 gauge needle, 18 gauge needle
- Fine dissecting hemostat
- 2.5mm, 30° small joint scope
- probe (1.5mm tip)
- 2.0 or 3.0 Shaver
- Arthroscopy Tower

Traction / Suspension

Accumed Traction Tower

- 4 finger traps
Anatomy of Portals

- Standard Portals are **Dorsal**
- 3-4, 4-5, 6R, MCR, MCU
- 1-2, 6U
- Superficial radial and ulnar nerves at risk
Case Ex #1: Radial Styloidectomy

- 62 yo F
- s/p distal radius fx, tx closed
- Pain w/ wrist extension/radial deviation (picking up her grandchildren)
Case Ex #1: Radial Styloidectomy

Case Ex #2: Ganglion

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Dry Technique

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Dry Technique

Case Ex. #3: TFCC repair
- 48 yo m, FOOSH
- ulnar-sided wrist pain
- X-rays: Ulnar neutral variance
- MRI: TFCC tear
Case Ex. #3: TFCC repair

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Case Ex. #3: TFCC repair

What else can be done?
- CMC arthritis
- Ulnar shortenings
- Wrist contracture releases
- Kienbock’s dz
- PIP and MPJ (UCL, etc.)
CMC Arthroscopy

Complications of Wrist Arthroscopy

• Infection
• Tendon rupture
• Chondrolysis
• Arthrofibrosis
• Neuropraxia
• Skin burns
• Ganglion at portal

Conclusions

• Important Diagnostic Modality
• Therapeutic Applications are expanding
• Relatively Safe
What else can be done?

- CMC arthritis
- Ulnar shortenings
- Wrist contracture releases
- Kienbock’s dz

SL

Dorsal Wrist Syndrome
Fluids

- Pressure: 30 mm Hg
- Avoid bubbles!!!