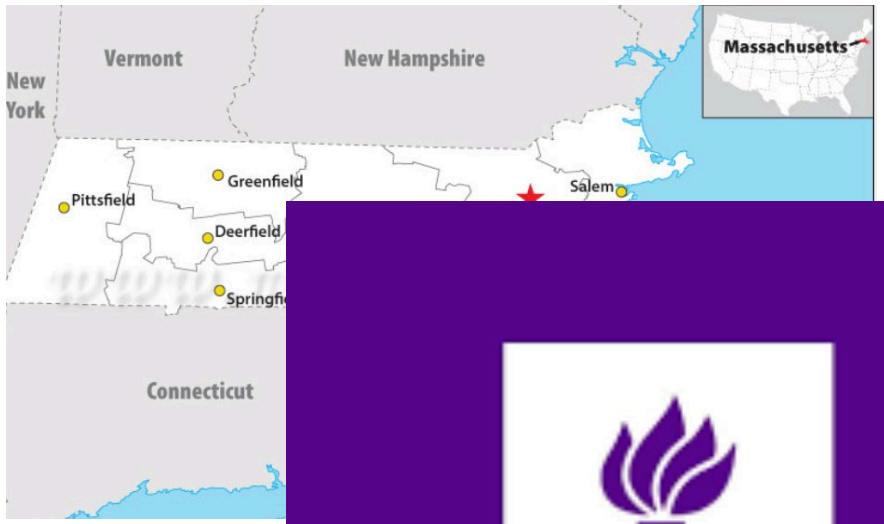
Common Hand Conditions – Initial Evaluation & Treatment, & When to Refer

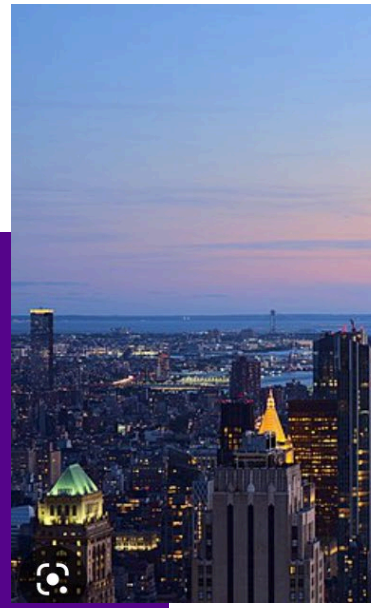
Devon J. Ryan, MD

SOS SYRACUSE ORTHOPEDIC SPECIALISTS

Who am I?

- Orthopedic surgeon – fellowship in hand & upper extremity surgery





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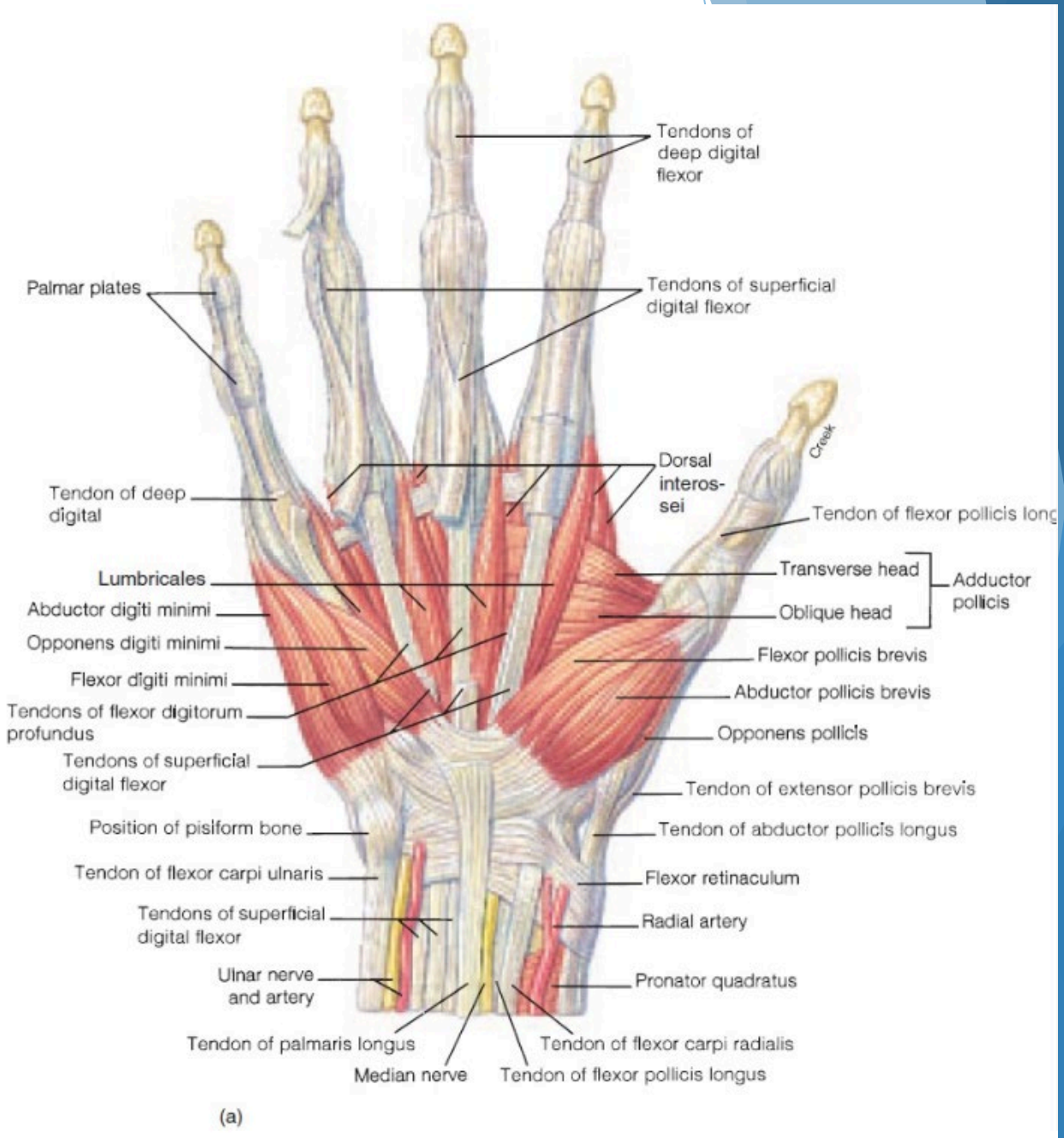
When to Refer?

- Anytime you're uncertain!
- Injections
- Fractures
- Lumps & bumps – easy to be tricked
- Things to get before:
  - XRs – often helpful
  - Labs – often helpful for nonfocal complaints or if any infectious concern
  - MRI or other advanced imaging – never!
  - Nerve studies – depending on preference



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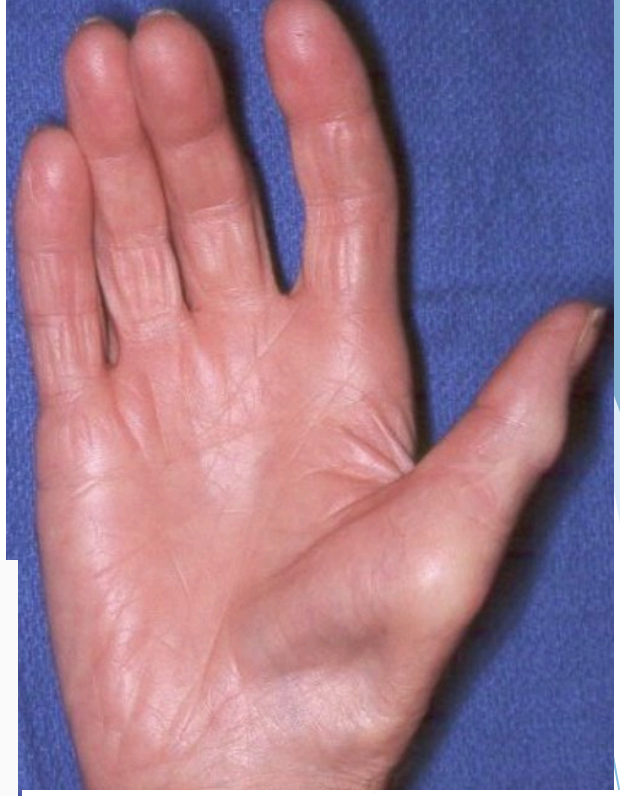
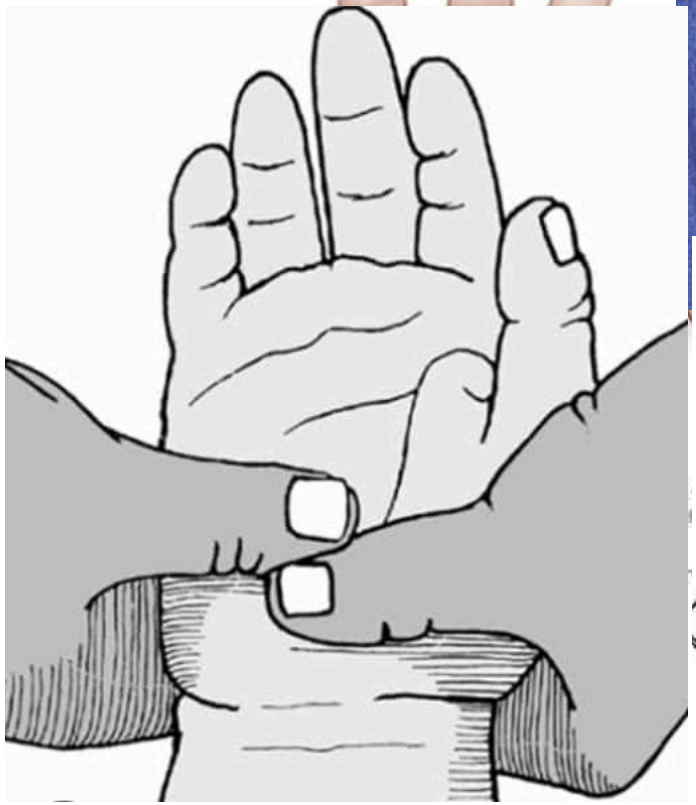
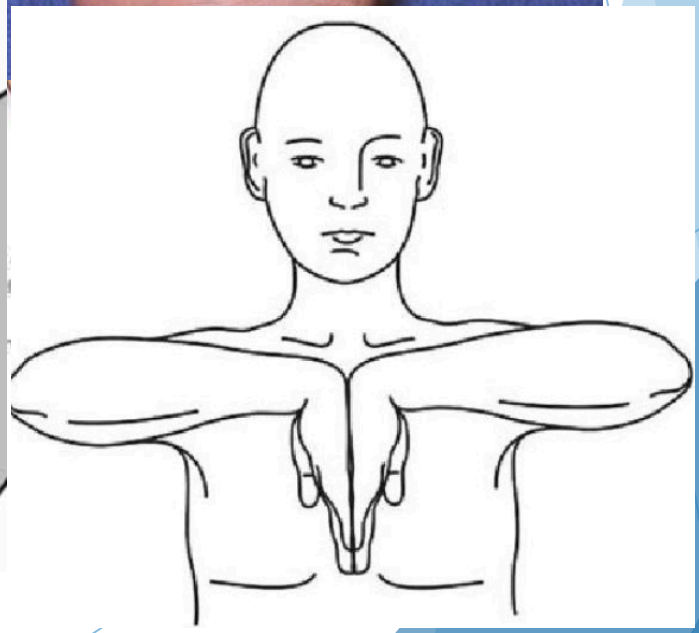
Carpal Tunnel Syndrome

- Compression of the median nerve at the “wrist”
- Numbness/tingling in the radial digits (or the whole hand)
- Exam: Thenar atrophy? Tinel’s, Durkan’s, Phalen’s







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Carpal Tunnel Syndrome

- Brace – can get OTC
- EMG/NCS – helpful to confirm diagnosis & assess severity (not always necessary, but can be done prior to referral)
- +/- Injection
- Surgery – open vs. endoscopic release

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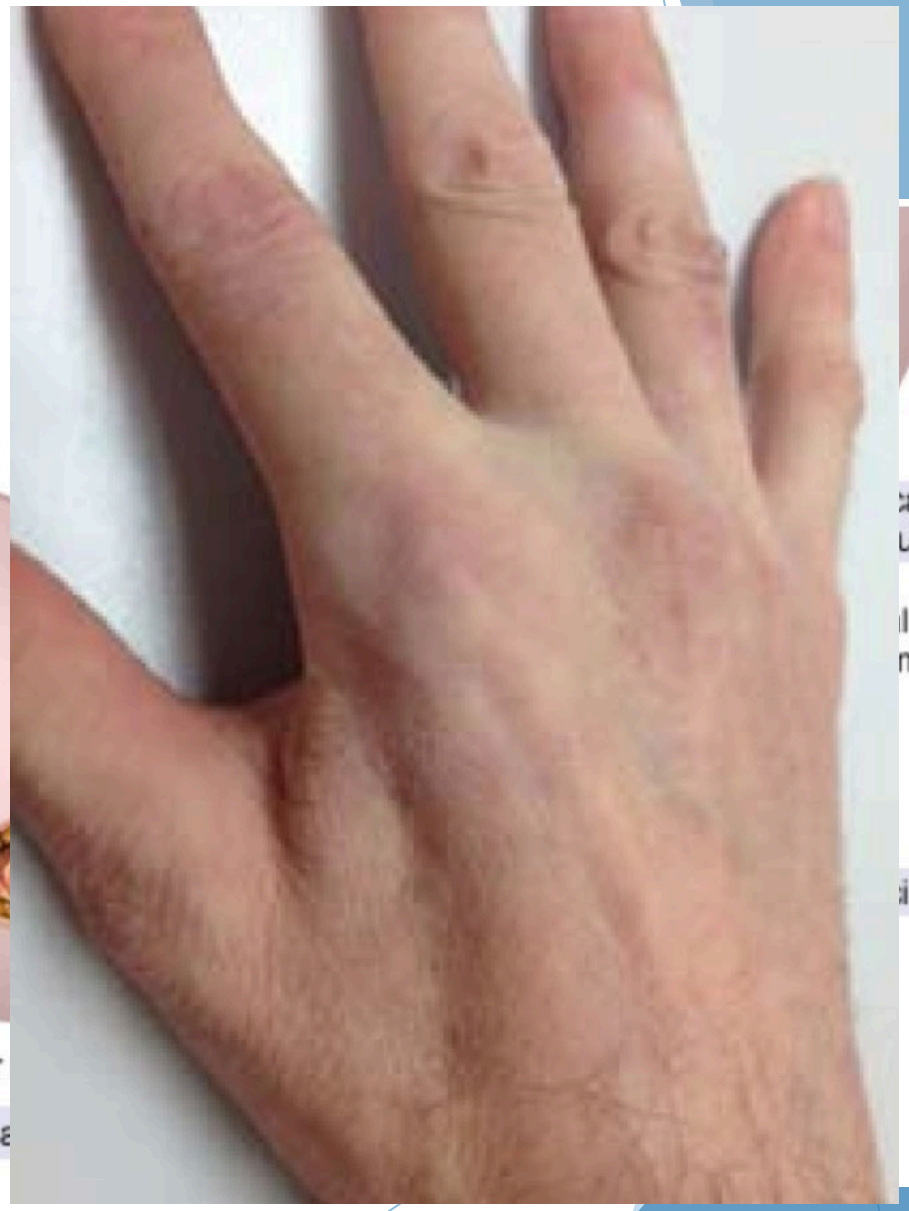
Cubital Tunnel Syndrome

- Compression of the ulnar nerve at the medial elbow
- Numbness and tingling in the ring and small fingers
- Exam: Interossei atrophy? Tinel's, flexion compression test
- EMG/NCS – always
- No role for injection
- Surgery – decompression, +/- transposition



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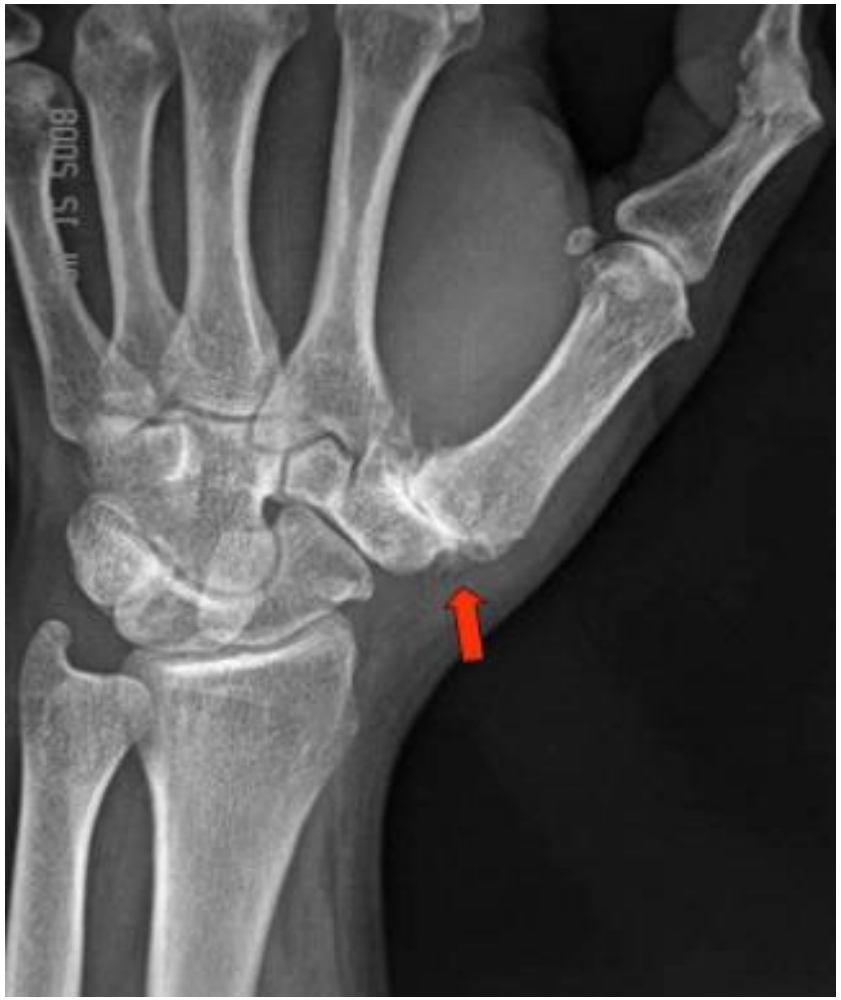
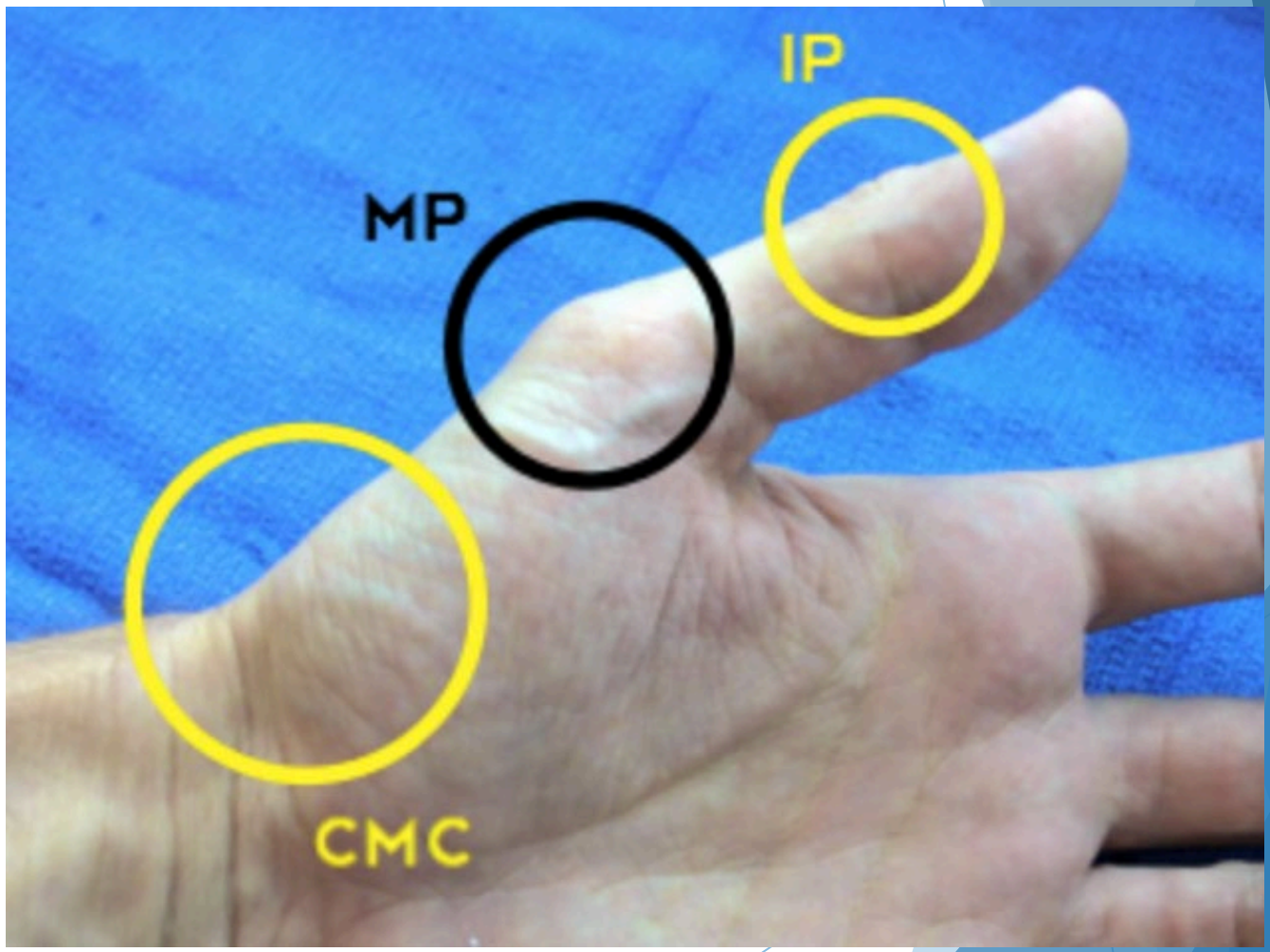
Thumb CMC Arthritis





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Thumb CMC Arthritis

- Pain at base of thumb w/ activities requiring pinch and grasp
- Exam – tenderness, pain with CMC grind
- Brace – CMC specific
- NSAIDs
- Injections
- Surgery – CMC arthroplasty

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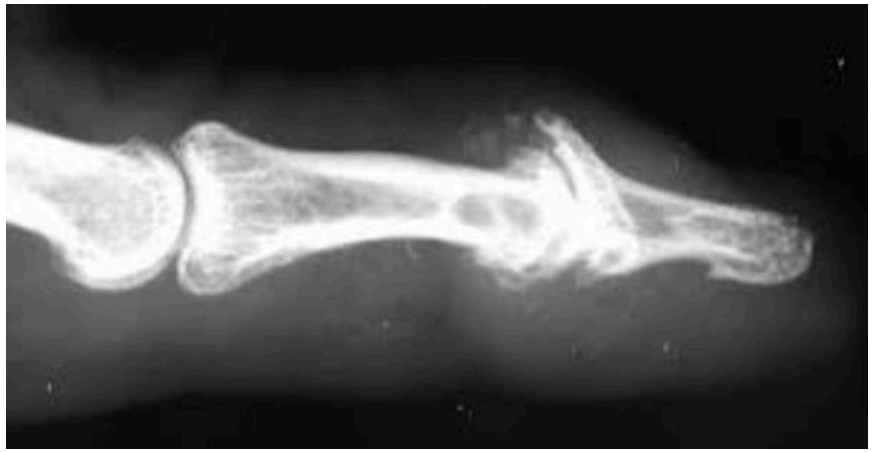
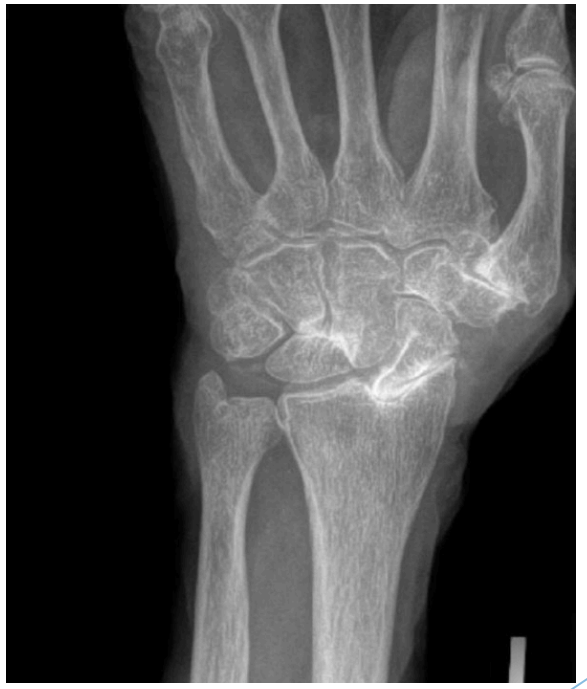
Other Common Types of Arthritis

- DIP joint: limited role for bracing/injections, generally observation vs arthrodesis



- Wrist (often SLAC pattern): often try brace/injections, multiple surgical options depending on pattern



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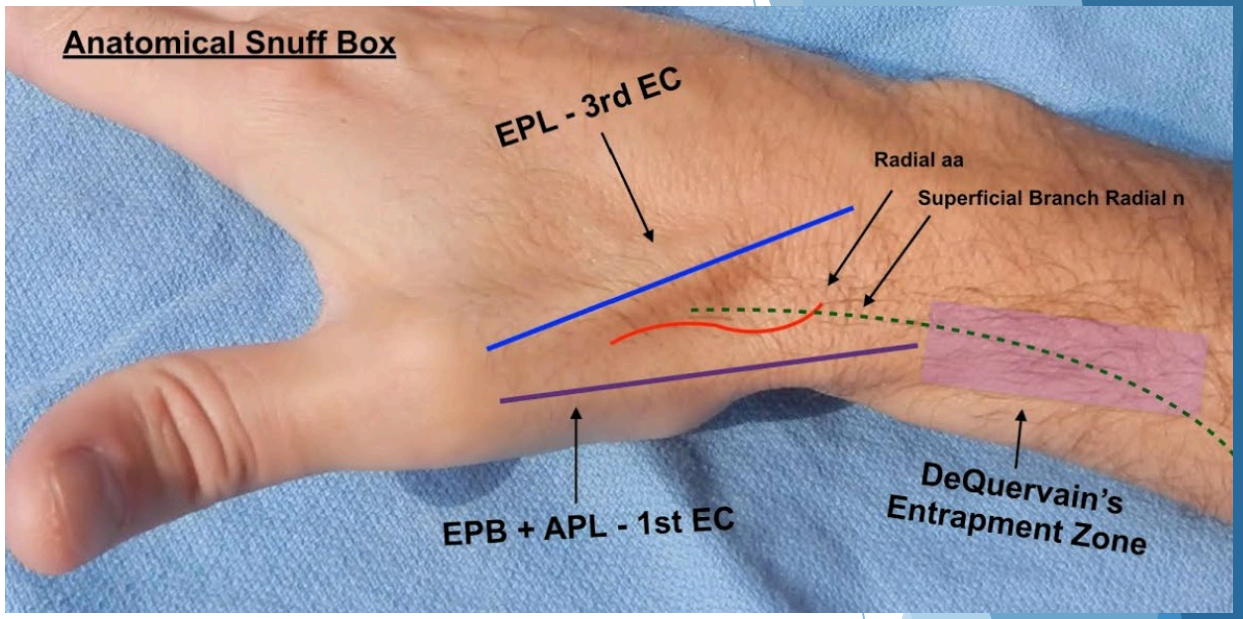
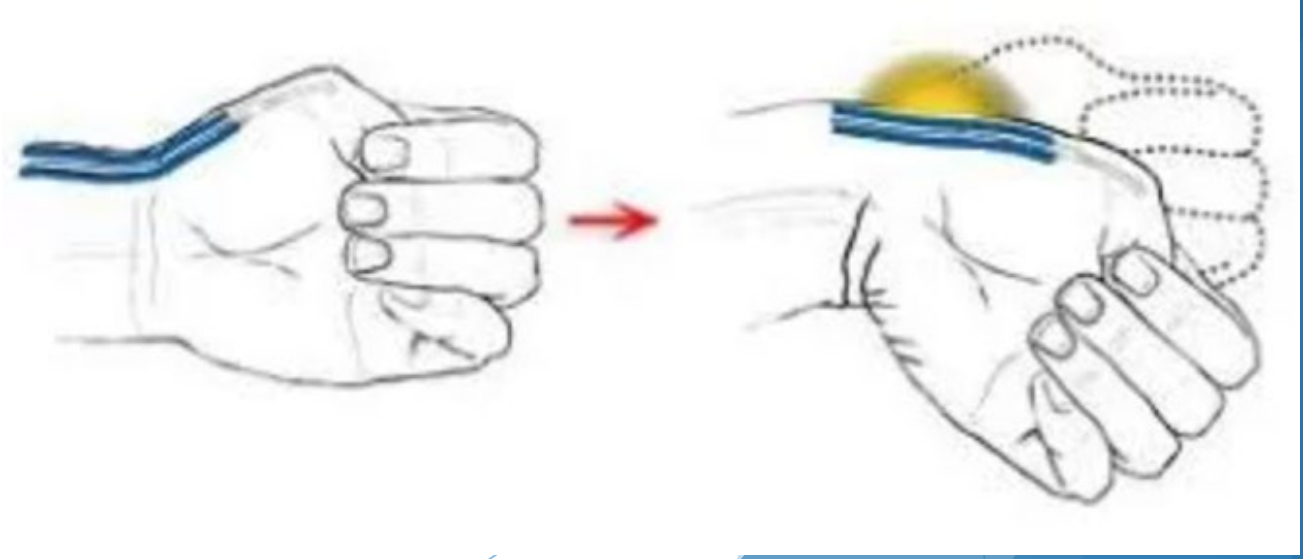
DeQuervain's

- Tenosynovitis of first extensor compartment
- Pain with pinch, grasp – often described as radiating down the thumb
- Common in pregnancy/postpartum
- Exam: Swelling over radial styloid, Finkelstein's
- Brace – thumb spica!
- Injection
- Surgical release





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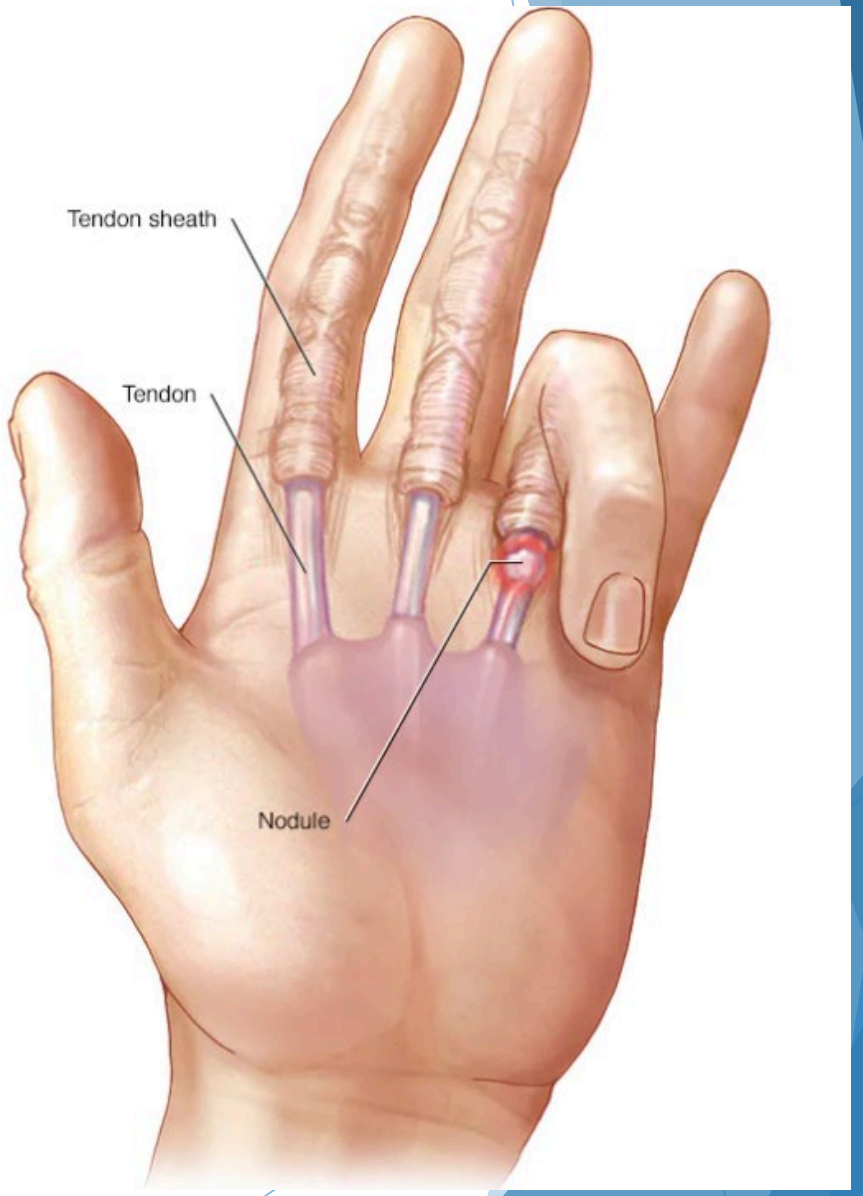
Trigger Finger/Thumb

- Thickening of flexor tendon sheath (A1 pulley) causing pain, clicking/locking
- Exam: Tenderness in distal palm, active clicking/locking, often small associated nodule or cyst
- Splint finger in extension at night (wrap with Coban)
- Injection (can be curative)
- Surgery (A1 pulley release)



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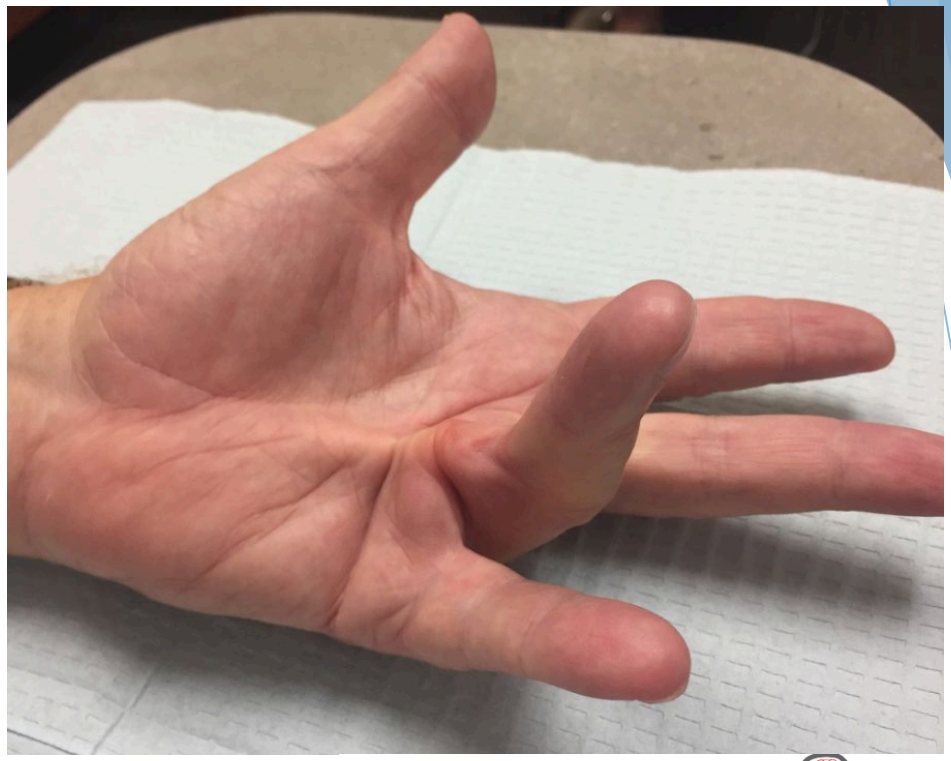
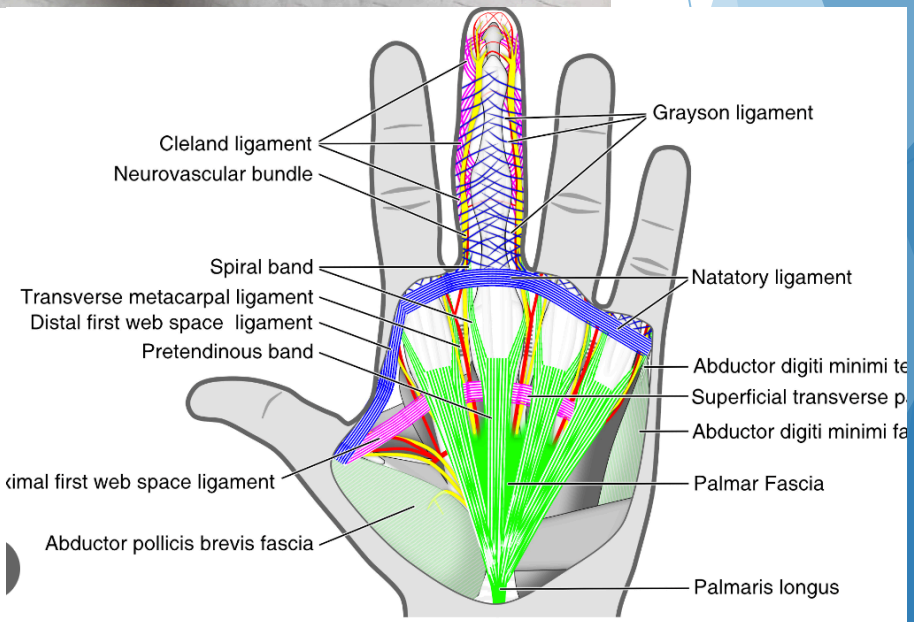
Dupuytren's

- Benign hypertrophy/contracture of palmar fascia
- Progresses from nodules to cords, which cause contractures
- Generally painless except for initial nodules
- Hereditary
- Exam: Tabletop test?
- Observation vs. in office procedures vs. surgical excision





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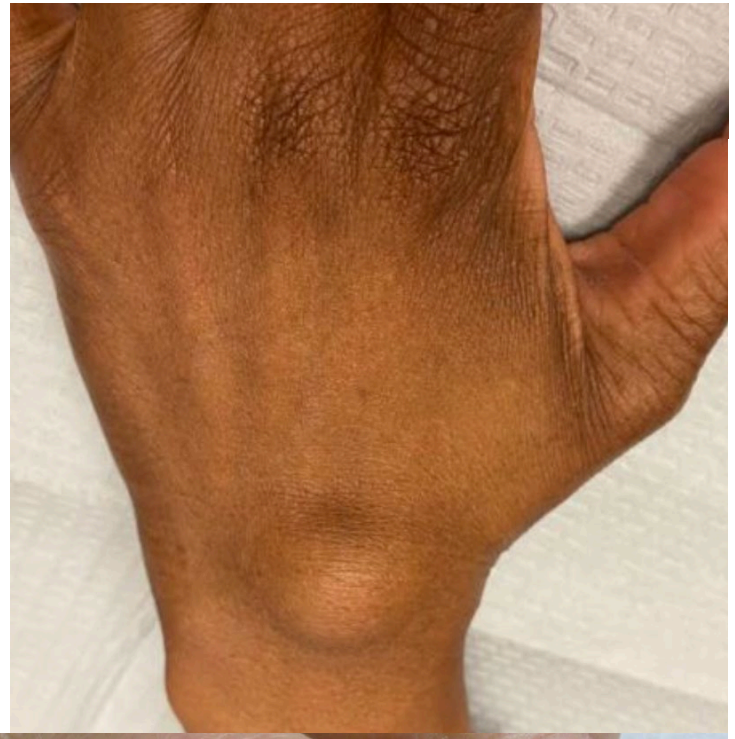
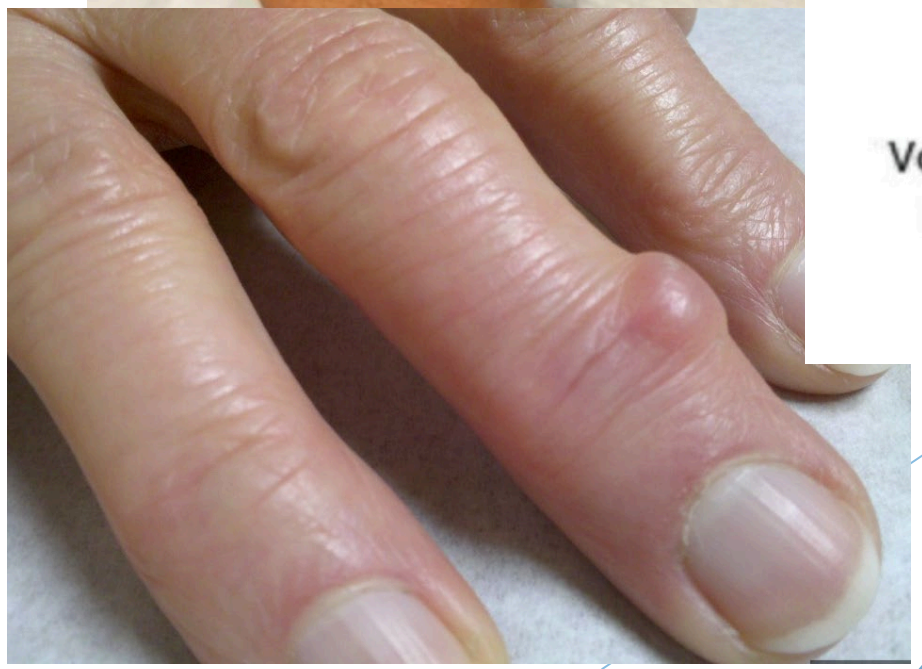
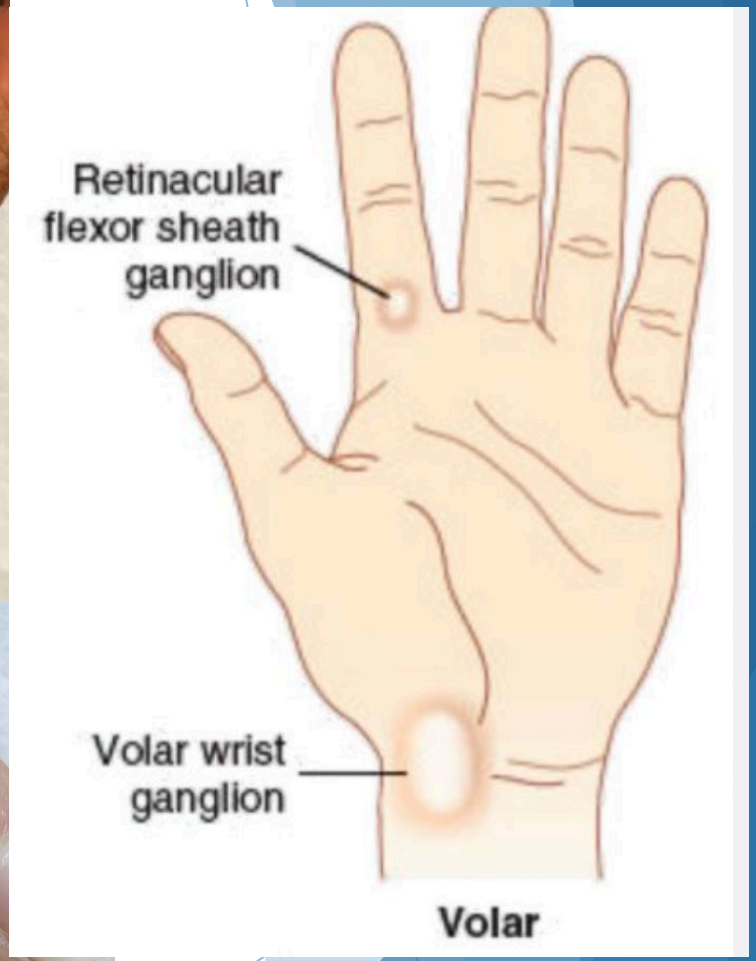
Ganglion Cysts

- Many names for same pathology in different locations
- Wrist (dorsal or volar) – ganglion
- DIP joint – mucous cyst
- Flexor tendon sheath – retinacular cyst
- Observation
- Aspiration – high recurrence
- Surgical excision







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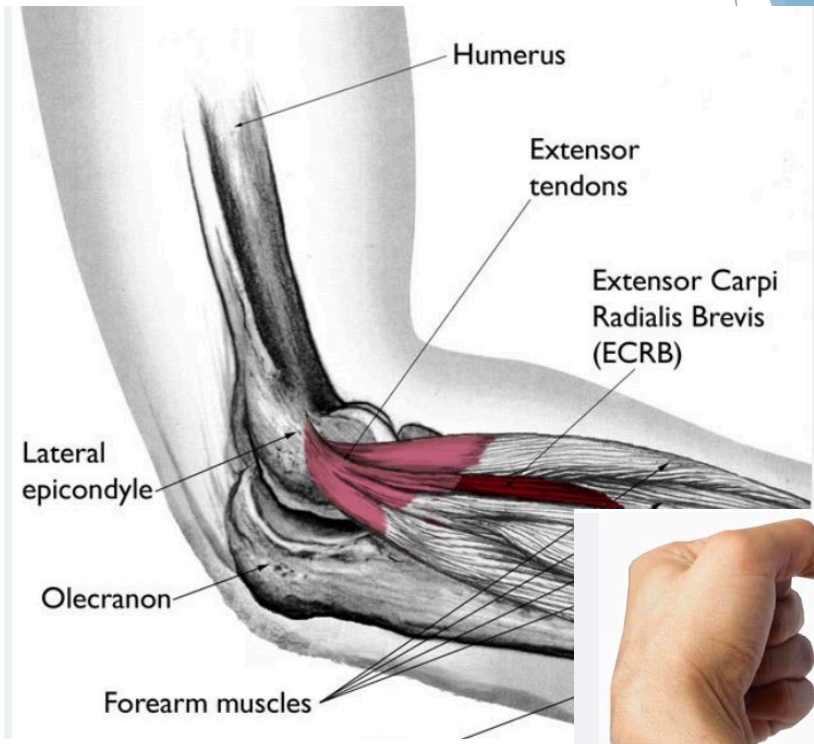
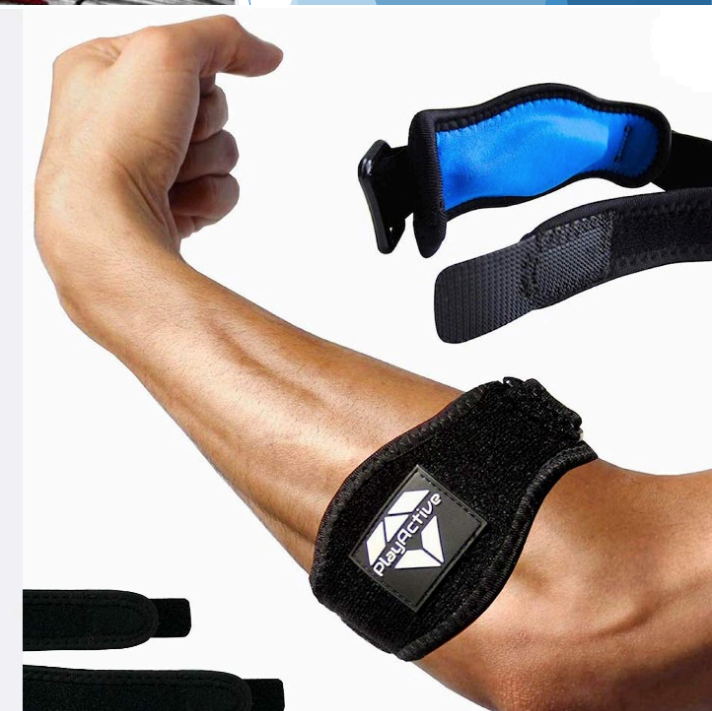
Lateral Epicondylitis – Tennis Elbow

- Tendinopathy of common extensor origin
- Acute or insidious onset
- Lateral elbow pain, pain with activities/lifting, pain at night
- Exam: tenderness over lateral epicondyle, pain with resisted wrist/finger extension
- Self-limited, BUT – *long course (6-12 mos)*
- NSAIDs, PT or home exercises, counterforce brace
- No need for MRI – does not change management
- Generally AVOID injections
- Surgical debridement if all else fails





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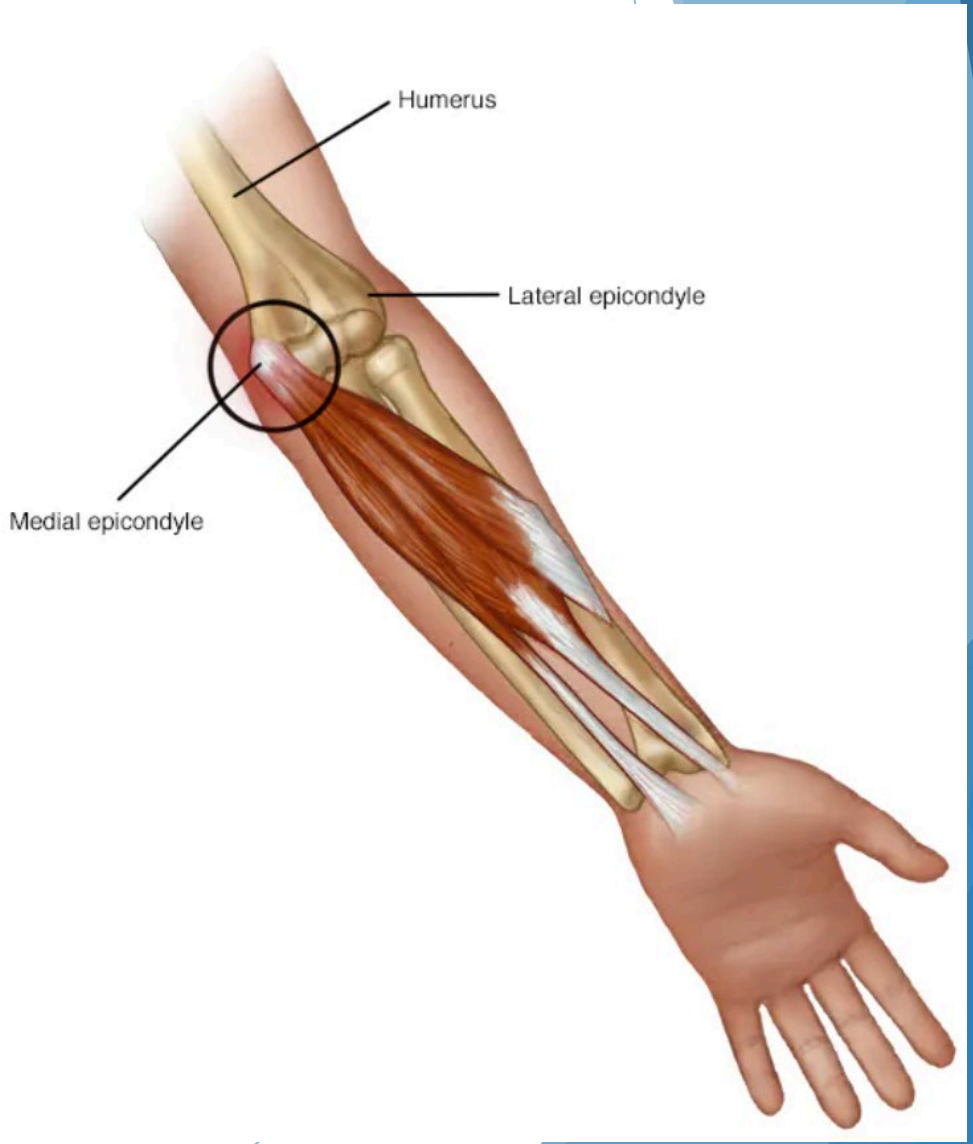
Medial Epicondylitis – Golfer's Elbow

- Tendinopathy of common flexor origin
- Acute or insidious onset
- Medial elbow pain, pain with activities/lifting, pain at night
- Exam: tenderness over medial epicondyle, pain with resisted wrist/finger flexion
- Self-limited, BUT – *long course (6-12 mos)*
- NSAIDs, PT or home exercises, counterforce brace
- No need for MRI – does not change management
- Never injections (for me)
- Surgical debridement if all else fails



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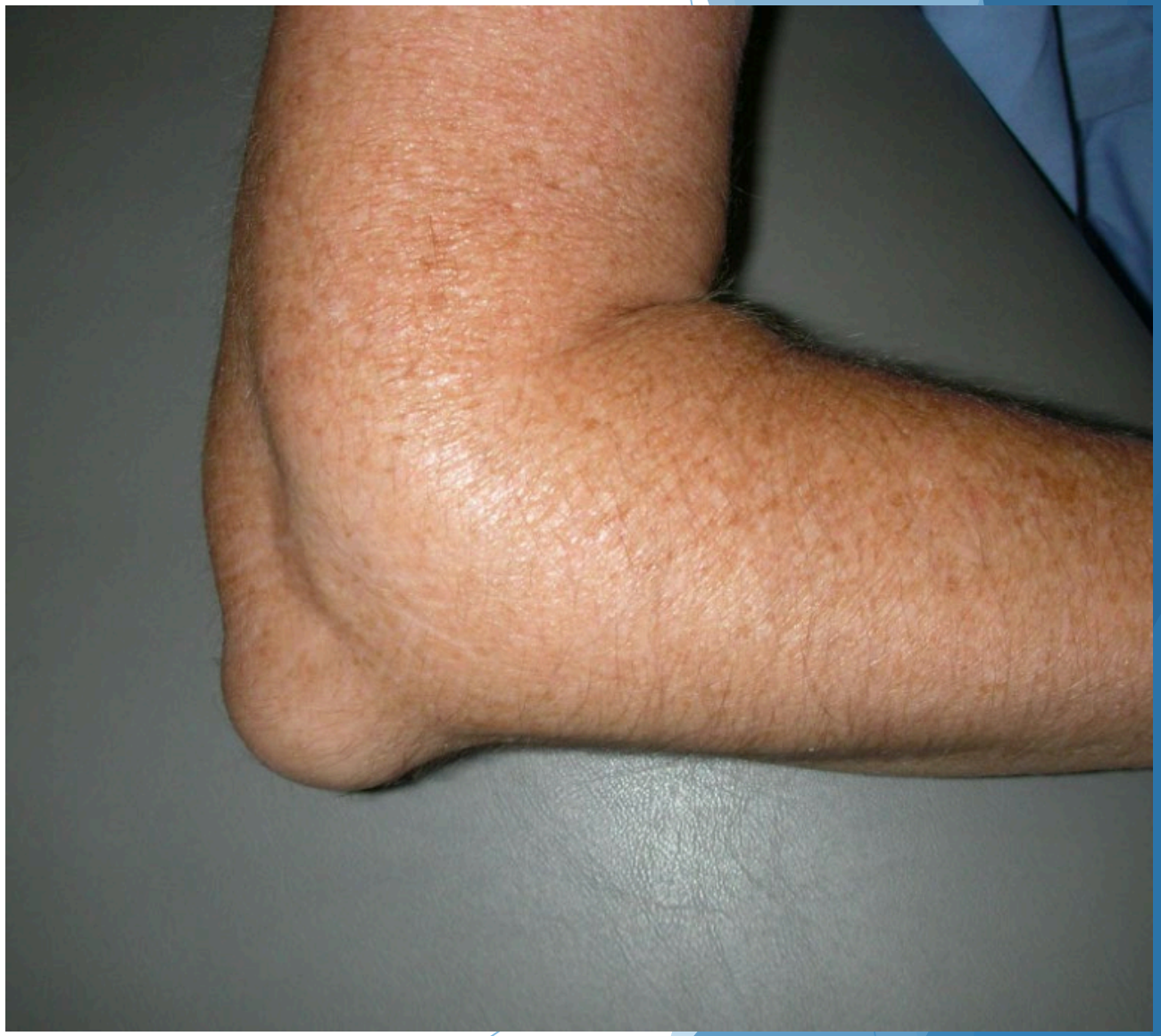
Olecranon Bursitis

- Insidious or posttraumatic
- Posterior swelling over tip of olecranon – often impressive
- Aseptic – painless
- Septic – red/painful, drainage is concerning and often necessitates surgery
  - Trial PO abx if mild
- Rx: Avoid pressure, light compression
- Do NOT aspirate!



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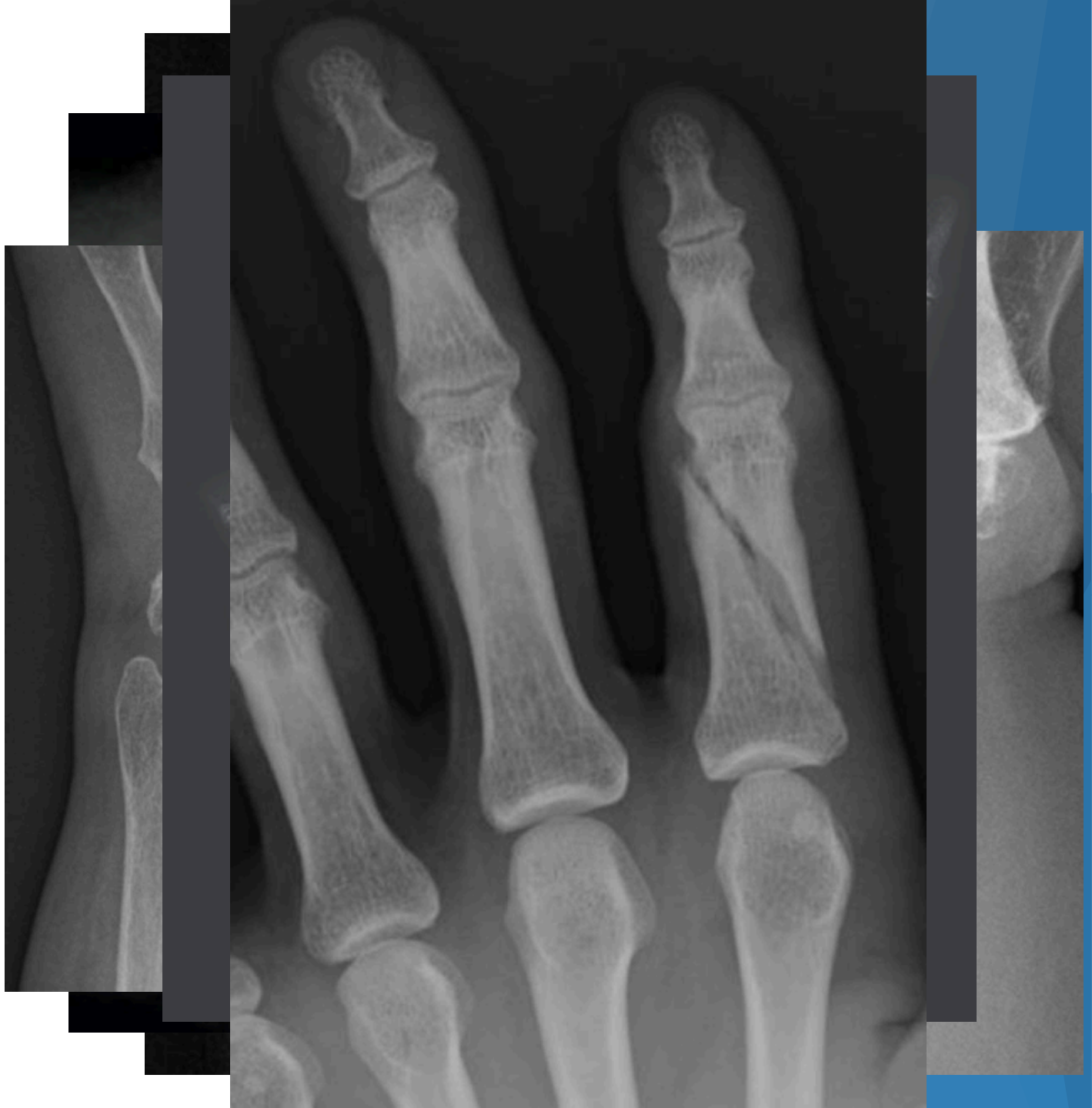
Fracture Potpourri

- Radial head – often nonop with early ROM
- Olecranon - usually operative
- Distal radius – grey area
- Metacarpals – grey area
- Fingers – grey area



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Thank you!