Common Upper Extremity Conditions

Ted Parks, MD
• Carpal Tunnel Syndrome
• Trigger Finger
• Lateral Epicondylitis
• Medial Epicondylitis
• DeQuervaine’s Syndrome
• Cubital Tunnel Syndrome
• Thumb basal joint arthritis (1st CMC OA)
• Gamekeeper’s/Skier’s Thumb
Carpal Tunnel Syndrome
Transverse Carpal Ligament

Median Nerve
Tendons

- High content of:
  - collagen fibers
  - connective tissue matrix
- Low content of:
  - cells
  - blood vessels
  - nerves
- Low metabolic rate
Nerve

- Axons
- Schwann cells (myelin)
- Complex micro vascular system
- High metabolic rate
Carpal Tunnel Symptoms

Pain
Numbness
Tingling
In the
Median Nerve Distribution!
Carpal Tunnel Syndrome is Not:

- Wrist pain
- Glove like distribution of symptoms
- Symptoms on the dorsal side of the hand
- Symptoms in the small and ring finger
- Symptoms that radiate up the arm
Tinel’s Test
Phalen’s Test
Thenar Muscle Atrophy
Etiology

• Trauma
• Ergonomics
• Arthritis
• Pregnancy
• Thyroid dysfunction
Treatment

• Eliminate the source of swelling
• NSAIDs
• Braces
• Cortisone injections
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- NSAIDs
- Braces
- Cortisone injections
Injection Site: Midline, 2cm distal to the distal wrist crease
Possible Results of Injection:

• Patient is permanently better

• Patient gets no relief at all

• Patient gets better, but symptoms return in more than 4 months

• Patient gets better, but symptoms return in less than 4 months
Surgery
Surgery
Surgery
Cubital Tunnel Syndrome Pain
Treatment

• NSAIDs
• Elbow pad
• Cortisone injection
• Surgery
Treatment

• NSAIDs
• Elbow pad
• Cortisone injection
• Surgery
Treatment

- NSAIDs
- Elbow pad
- Cortisone injection
- Surgery
Trigger Finger
Trigger Finger

• Finger locks in the flexed position

• Painful flexor tendon nodule
Finger Anatomy
Finger Anatomy
Finger Anatomy

Flexor Tendon Pulleys
Treatment Options

- Extension splint
- NSAIDs
- Cortisone Injection
Cortisone Injection Technique:
Inject midline, 2cm proximal to the MCP joint crease
Surgery

• Safe
• Simple
• Effective
A\textsubscript{1} Pulley Release

Resolution of Nodular Tendonitis
Thumb Pain

Gamekeeper’s/Skier’s Thumb

De Quervain’s

1st CMC Arthritis
Skier’s thumb
Gamekeeper’s thumb
De Quervain’s tendonitis vs 1st CMC joint arthritis
Finklestein’s Test
Finklestein’s Test
Arthritis at the Base of the Thumb

AKA: Basal joint arthritis, 1st CMC arthritis, Trapezio-metacarpal joint arthritis
Left first carpometacarpal joint
1. Feel for the metacarpal bone of the thumb

2. Keeping the needle perpendicular to the bone, pull the thumb to open the joint, try until you fall into the joint

PULL
Lateral Epicondylitis
aka: Tennis Elbow
History

- Pain over the lateral side of the elbow
- +/- radiation down the extensor muscles
- Stiffness
- Pain with wrist/finger extension
- +/- identifiable cause (ie: tennis)
Physical Exam

• Tender over the lateral epicondyle

• Pain with resisted wrist and finger extension
Treatment

Non-surgical (conventional)

• NSAIDs
• Stretches
• Compression strap
• Cortisone injections

Non-surgical (unconventional)

• ESWT (extracorporeal shock wave treatment)
• PRP injections

Surgery

• Historically poor results
Stretching
Forearm Strap
Cortisone Injection
Ossatron
Platelet Rich Plasma Therapy (PRP)
Platelet Rich Plasma Therapy (PRP)
Surgery
Thank You!

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