

Causes

1. **Soft Tissue Disorders**: - Tendon disorders, ligament sprains, Dupuytren's Contracture, Ganglions

2. **Joint Disease**

3. **Bone Disorders** - Osteochondritis of the lunate

4. **Nerve Entrapments** - Median, ulnar Nerve, Bowler's Thumb

Referred Pain, Vascular Causes

DeQuervain's Tenosynovitis

- Involves repetitive strain of the adductor pollicis longus and extensor pollicis brevis

- Women between 30 and 50yo

- Associated with: RA, Psoriatic Arthritis, Trauma, Pregnancy

Hx

- Insidious Wrist pain (radial side + 1st metacarpal sharp pain)

Pain can radiate up wrist and forearm

Worse with thumb and wrist movements

Better with rest, heat or cold

Exam

Minor swelling over distal radius

Tenderness over involved tendons

AROM + RROM of wrist and thumb extension painful - pt describes it as "squeaky"

Pain worse with grasping, abduction of the thumb and ulnar deviation

RROM WNL or weakness due to pain

+ve Finkelsteins (pain on lateral wrist)

DDx

RA or OA

Cx radiculopathy (C5,C6)

Intersection Syndrome

CTS, Ganglion Cyst

Scaphoid fracture

Keinbock's disease



Management

- Resting and avoiding triggering cause
- Ice @ Radial styloid
- Ultrasound with hydrocortisone gel
- Buddy taping of thumb to base of first finger
- Chronic cases - stretching exercises into the palm - sets of 20 , held for 5 seconds
- Electrical stimulation along tendons
- NSAIDs advice
- Refer to GP - Corticosteroid injection if not responding

Dorsal Wrist Syndrome

- Mild injury to the scapholunate ligament , dorsal wrist ganglion

Exam

- Tenderness over the dorsal aspect of the wrist in the region of the scapholunate joint
- Pain on passive extension of the wrist
- Pain on finger extension test
- Clunking on Watson's test
- No physical findings of rotary subluxation of the scaphoid , absence of abnormality on wrist x-ray

Management

- Steroid injection into the wrist , if that fails, consider surgery

Dupuytren's contracture

- Hypertrophic nodular fibroplasia of the palmar fascia
- Flexion deformity of MCP and PIP
- Affects more white males at 60-70 yo
- 4th and 5th digit most affected
- Hereditary, chronic alcoholism, epilepsy and diabetes

Management

- Passive stretching of flexor tendons after massage
- Surgery for advanced cases

Gamekeeper's Thumb AKA Skier's thumb

- Sprain/ rupture of UCL of MCP joint of the thumb
- Valgus force on abducted 1st MCP/ FOOSH

Hx: Pain over UCL of 1st MCP joint (starts immediately, pt hears snapping/popping)

Valgus trauma , pt describes it as I jammed my thumb/my thumb got bent back

Weakness in punch grip strength. Rupture = unable to pinch at all!



Exam

Swelling + bruising over ulnar aspect of MCP joint

TTP over UCL, soft mass = retracted, ruptured UCL, hard mass = avulsion, MFTP over forearm + thumb muscles

AROM + PROM shows hyperextension/hyperabduction, RROM weak due to pain

Median/radial nerve involvement possible

+ve valgus stress test

+ Empty end feel/excessive motion = Grade III sprain

DDx

- MCP Joint dislocation

- Phalangeal f#

- Congenital 1st MCP hypermobility

- Torn RCL of thumb (rare)

Management

4-6 weeks of thumb spica cast immobilisation

Refer to GP/A&E

Ganglion

- Fluid filled benign lump that comes from tendon sheath/joint capsule

- Usually on the dorsum of the hand

Hx: Painless mass on wrist - can be painful

Usually insidious but can be caused by minor/major trauma

If painful, pain usually comes and goes - comes on with excessive wrist use

Can limit ROM/decrease grip strength

Cyst can impinge on neurological structures

Exam: Visible mass on wrist

TTP, soft + rigid

Joint cysts = larger + soft

Tendon cysts = smaller and hard

+Ve Finger extension test

Allen's test if pressing on vascular structures

DDx: Infection (red, swollen, painful)

Tenosynovitis

Sarcoma

Lunate/carpal dislocation

Lipoma

RA

Management: PRICE, Aspiration (if causing symptoms), NSAIDs

Consider US

