

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

