

Elbow & Wrist Assessment

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Special history questions

- Specific mechanism of injury & forces involved? Did you falling on outstretched hand?
- Any numbness, tingling or weakness?
- Type of work, typical posture?
- What makes it better or worse?
- Prior injuries or treatment?

Inspection

- Asymmetry, bruising, bumps, color, swelling, height, head tilt, winging scapula, anatomical variations
- Posture of neck , shoulders, body
- Carrying angle

Fracture screen (if indicated)

- Older than 55?
- Bony tenderness on palpation
- Percussion, tuning fork(128 Hz)
- Torsion test, ultrasound
- Elbow pain with grip/wrist motion

Palpation

- Medial epicondyle, ulnar groove, med collateral lig , common flexor tendon, flex carpi ulnaris, palmaris longus, flex carpi radialis, pronator teres, pronator teres, biceps tendon, head of radius, radial tunnel, lat epicondyle, common ext tendon, anconeus, ext carpi ulnaris, brachioradialis, ECRB, ECRL, ext digitorum, supinator, triceps, olecranon, cubital fossa, brachialis, thumb extensor, interossei, thenar pad, hypothenar, carpal tunnel, tunnel of guyon, anatomical snuff box, metacarpals, fingers, scaphoid, lunate, triquetrum, pisiform, lister tubercle, collateral lig

Functional ADLs

- Elbow flex/ext
- Hand shake

AROM

- Flex.....150°
- Ext.....0 to 5°
- Supination...90°
- Pronation.....90°
- Wrist Flex.....80°
- Wrist Ext.....70°
- Ulnar flex.....30°
- Radial flex.....20°
- MCP flex.....90°
- MCP ext.....40°
- Abd.....20°
- Add.....20°
- PIP flex.....100°
- PIP ext.....0°
- DIP flex.....80°
- DIP ext.....10°

PROM & joint play

Myotomes (resisted isometric)

- Brachioradialis (C5,C6-radial)
- Biceps (C5, **C6**-musculocutaneus)
- Triceps (C6, **C7**, C8-musculocutaneus)
- Wrist extensors (**C6**, C7, C8-radial)
- Wrist flexors(C6, **C7**-median/ulnar)
- Finger flexors(C7,**C8**, T1-ulnar/median)
- Interossei (C7, C8, **T1**-ulnar)

Neurovascular screen

- **Sensory** : light touch, 2 points discrimination, vibration (128 Hz fork), Tinel's
- **DTR's**: Biceps (C5), Brachioradialis (C6), Triceps (C7)
- **Grip Strength** (Dynamometer)
- **Radial pulse**, Brachial pulse, blanching, temperature

Orthopedic tests

- **Screening**: Valgus/Varus stress (0, 30')
- **Lateral epicondylitis**: Cozen test, Mill's test. Middle finger, book lift
- **Medial epicondylitis**: Reverse Cozen, Reverse Mill's
- **Pronator teres/ median** : Tinel's, Elbow flex, pronator stretch, sustained flex

- **Carpal tunnel syn**: Phalen's, Tinel's, Flick maneuver
- **Ulnar neuropathy** : Tinel's, Froment's, Wartenburg
- **Vascular disorder** : Allen's test
- **Tenosynovitis** : Finklestein's test
- **Instability** : Valgus/Varus stress, Lunate ballotment, Watson's, Thumb abd test
- **Fracture**: scaphoid Fx test
- **TFC tear**: Press test, dorsal glide
- **RA & DJD**: bracelet test, Bunnel test