# Upper Limb Examination

*Screen the whole patient, then examine the region*



## *The universal screen*

RUN FIRST · ON EVERYONE

### HISTORY & CORD

- *"How long? Getting worse?"*
- *"After illness, vaccine or sudden severe arm pain?"*
- Hoffmann's, both sides
- "Handwriting, buttons, balance?"

### LOOK — HEAD TO HAND

- Gait
- Face — ptosis, miosis
- Wasting — deltoid, thenar, FDI
- Fasciculations
- Scapular winging

### STRENGTH — 3 STATES

- **Equal** — M5 · no flag
- **Gives slightly** — M4 · yellow
- **Easily overcome** — ≤M3 · red

*Push firmly. Wincing is pain, not weakness.*

*Anything positive → stop. Refer urgently.* Myelopathy, Pancoast, MND, brachial neuritis — the region is irrelevant. Screen clean? Examine the region the patient points to.

## 01 · SHOULDER

*"hurts · can't lift · aches at night"*

- **Frozen shoulder** — MOVE passive external rotation restricted, elbow tucked
- **Rotator cuff / impingement** — MOVE painful arc 60–120° + Hawkins–Kennedy · weak = tear
- **AC joint** — FEEL one-finger tenderness on the joint + scarf test

### NERVE MIMIC — C5 ROOT

Weak deltoid & biceps, lateral arm sensory loss, dull biceps reflex.

**Rule:** *shoulder pain + weakness not fitting the cuff → screen the neck.*

### DON'T MISS

- Severe pain that **eased as weakness appeared** → brachial neuritis
- Scapular pain + Horner's + smoker → Pancoast
- No external rotation after seizure / fall → posterior dislocation

**Yellow:** *cuff weakness (M4), tear pattern → shoulder surgeon, not prolonged physio.*

**Motor:** shoulder abduction (C5 · axillary) · elbow flexion (C5–6 · biceps)

## 02 · ELBOW

*"outside · inside · hurts to grip"*

- **Tennis elbow** — MOVE/FEEL Maudsley's positive + lateral epicondyle tenderness
- **Golfer's elbow** — MOVE/FEEL resisted wrist flexion, elbow extended + medial epicondyle
- **Olecranon bursitis** — LOOK swelling over the olecranon · hot = septic

### NERVE MIMIC — THREE NERVES

Lateral → radial tunnel (ECU test +, tender 3–4 fb distal). Medial → cubital tunnel (ulnar tingling, weak FDI). Volar → lacertus syndrome (median): tender over the lacertus, weak FPL/FCR/FDP2, no night waking.

**Rule:** *ECU test before you inject; palpate the lacertus before calling tingling fingers carpal tunnel.* **ECU:** *elbow extended · forearm pronated · resist radial deviation.*

### DON'T MISS

- Sudden pain lifting + weak supination + **Popeye** + gap → distal biceps rupture (refer within days)
- Hot, swollen olecranon bursa → septic bursitis
- Locked elbow / mechanical block → loose body

**Yellow:** *tennis elbow not settling, or any weakness → radial tunnel; refer, don't re-inject.*

**Motor:** elbow flexion (biceps) · elbow extension (C7 · triceps) · wrist extension (radial) · lacertus triad: FPL/FCR/FDP2 (median)

Mr Alistair Phillips · MBBS FRCS (Tr & Orth)

## 03 · WRIST

*"wrist hurts · fingers tingle at night · a lump"*

- **De Quervain's** — MOVE/FEEL Finkelstein's (Eichhoff's) test · first dorsal compartment
- **Carpal tunnel syndrome** — MOVE nocturnal median tingling · test APB
- **Ganglion** — LOOK smooth swelling, transilluminates · reassure

**NERVE MIMIC — WHOLE MEDIAN NERVE**

Lacertus (elbow): weak FCR/FPL, antecubital tenderness, no night waking. AIN: weak FPL/FDP2. C6 root. CMC OA mimics CTS.

**Rule:** *think CTS → screen the whole nerve, neck to palm; confirm with APB.*

**DON'T MISS**

- **Snuffbox tenderness after a fall** → scaphoid fracture until proven otherwise
- Constant numbness / severe pain, esp. after distal radius fracture → acute CTS, surgical emergency

**Yellow:** *thenar wasting or constant symptoms → direct to hand surgery, not a 6-month splint.*

**Motor:** APB (median at wrist) · thumb-index pinch / FPL (AIN) · wrist extension (radial)

## 04 · HAND & THUMB

*"thumb base hurts · finger catches · won't straighten"*

- **Base-of-thumb (CMC) OA** — LOOK/MOVE squared base + grind · test APB (mimics CTS)
- **Trigger finger** — FEEL/MOVE A1 pulley nodule + catching / locking
- **Dupuytren's** — LOOK palpable cords; Hueston tabletop · PIPJ → refer earlier
- **Mallet finger** — LOOK DIPJ droop, no active extension · splint <4 weeks

**NERVE MIMIC — ULNAR**

Ring/little numbness: test the dorsal ulnar hand — affected = cubital tunnel (elbow); spared = Guyon's (wrist).

**Rule:** *numbness location is not compression location — localise the nerve.*

**DON'T MISS**

- Knuckle wound from a punch → **fight bite**, septic-arthritis risk
- Finger held flexed + fusiform swelling + pain on passive extension → **flexor sheath infection** (Kanavel's)
- High-pressure injection injury — looks trivial, is an emergency

**Yellow:** *Dupuytren's with PIPJ contracture; mallet >4 weeks — still refer.*

**Motor:** APB (median) · first dorsal interosseous (ulnar) · FDP to little finger (ulnar)

### *The referral letter — name the region, the pattern, the nerve*

**RED · URGENT**

*"Hoffmann's positive with a gait change — concerned about cervical myelopathy. Please see urgently."*

**YELLOW · DIRECT**

*"APB and FPL weak, no wasting — problem proximal to the carpal tunnel. Requesting a direct hand surgery opinion."*

**GREEN · ROUTINE**

*"Squared thumb base, positive grind, normal APB — base-of-thumb OA. Referring via the MSK pathway."*

The full framework — regional walkthroughs, the nerve mimics, video demonstrations

**alistairphillips.co.uk/gp-upper-limb-exam** · Built on the clinical triad of nerve compression diagnosis. Hagert E, *International Orthopaedics* 2025 (open access); Jepsen et al. 2006; Cook et al. 2010.

Mr Alistair Phillips · MBBS FRCS (Tr & Orth) · Consultant Hand, Wrist & Elbow Surgeon