



University Hospital Galway

EMERGENCY DEPARTMENT
GalwayEM.ie

Hand Injuries

(<https://galwayem.ie/index.php/index.php/guidelines/trauma-and-musculoskeletal/hand-injuries>)

Category

[Trauma and Musculoskeletal](#)

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Hand Injuries

NB Hand injuries are important. Closed hand fractures requiring surgery are referred to Ortho On-call. Open fractures with potential tendon and nerve injuries are referred to the Plastic surgeons. If you think a fracture may need surgery - ask advice.

Metacarpal injuries

Fracture dislocation base of 1st M.C.(Bennett's #, Rolando #)

Refer to Ortho On-call.

Fracture base 1st M.C. not involving joint

POP slab including thumb. Refer Virtual Fracture Clinic (VFC).

Fracture neck 5th M.C. (Boxer's #) (& less commonly of other M.C.'s)

Check for rotational deformity. Position usually acceptable.

Tubigrip/ Futura splint and buddy strapping. Encourage finger exercises.

If no rotational deformity D/C or ED review clinic 1-2 weeks. If rotational deformity refer to VFC. If angulation >45° refer Ortho On-call.

Other undisplaced MC fractures

Usually well splinted by neighbouring bones so: tubigrip/ Futura splint

Encourage finger exercises.

Refer VFC.

Severely displaced M.C. fractures

Multiple M.C. fractures

Refer Ortho On-call.

Metacarpophalangeal joint (MCPJ) injuries

Dislocation 1st MCPJ

Reduce, Check ulnar collateral ligament.

Thumb splint.

Refer VFC.

If irreducible - refer Ortho On-call.

Ruptured ulnar collateral ligament

Refer Ortho On-call.

Sprain 1st MCPJ

Exclude instability

Advise mobilise

Thumb spica if necessary for symptoms

Review clinic 2 weeks if follow up needed

Dislocation other MCPJ

Rare - ask advice

Fractures of the phalanges (PP)

Undisplaced fractures (Check for rotational deformity)

Neighbour strapping.

Refer VFC.

Displaced fracture

Refer Ortho On-call.

Epiphyseal fracture base PP

Reduce (local infiltration of LA)

Re-X-ray. Buddy strapping

Refer VFC.

Injuries of the PIP joints

Dislocation PIPJ

Ring block, reduce, check stability, Re-X-ray. Buddy strapping.

Refer VFC.

Sprain of PIPJ

Buddy strapping. Encourage mobilisation

Review Clinic 1-2 weeks if needed.

Volar plate injuries

Large fragment with significant intra-articular component refer Ortho On-call.

Small avulsion, buddy strapping and refer Hand OT.

Finger tip injuries

Dislocated DIPJ

Reduce, test stability, re-X-ray

If stable - no splintage required. Refer VFC.

Epiphyseal fracture base D.P.

Undisplaced Mallet splint and refer VFC.

Displaced Reduce (digital nerve block)
Replace nail under nail fold.
DO NOT remove the nail unless absolutely necessary
If open wound give antibiotics
Mallet splint. Review clinic 5 days.

Other fractures of the D.P.
If subungual haematoma - trephine, and Flucloxacillin (as have made compound)

Mallet finger

X-ray
If no fracture or small avulsion Mallet splint and refer Hand OT
If intra-articular fracture >25% refer Ortho On-call.

Tendon & Nerve Injuries in the Hand

-- Closed tendon injuries --

Extensor tendon central slip rupture (Boutonnière deformity)

Splint
Refer Hand Surgery service

Closed rupture flexor tendons

Refer Hand Surgery service (usually FDP)

Closed EPL rupture

Refer Hand Surgery service

-- Open tendon injuries --

Extensor tendons PARTIAL division

If > 50% refer Hand Surgery service.
If < 50% ask advice

COMPLETE division

Refer Hand Surgery service

Flexor Tendon injuries

Refer Hand Surgery service

Open nerve injuries

Refer Plastic surgeons