Finger and toe injuries

Queensland Ambulance Service

Exclusion from transport to General Practice

- Compound fracture (skin broken over deformity)
- Neurovascular compromise (no sensation or warmth in finger or toe)
- Complete inability to mobilise independently

Management

- Analgesia as required
- Immobilisation of finger or toe.

General Practice

Assessment

1. Continually assess the neurovascular status of affected finger or toe
2. Imaging as required.

Management of fractures

Fractures involving >30 per cent of intra-articular surface must be referred to SCHHS Fracture Clinic.

Thumb:

- Bennets Fracture (base of the first metacarpal bone which extends into the CMC joint)
  - Direct admission to Emergency Department
- Angulated proximal phalanx fracture
  - Direct admission to Emergency Department.

Finger - distal phalanges:

- Consider appropriate analgesia +/- NSAID
- Splint
- Review with usual G.P. in 1 week.
Finger - middle and proximal phalanges:
- Consider appropriate analgesia +/- NSAID
- Reduce under haematoma block or digital block
- Splint
- Review post-splinting X-ray
- Refer to Community Fracture Clinic if no escalation triggers are evident.

Finger - mallet:
- Consider appropriate analgesia +/- NSAID
- Mallet splint
- Review post-splinting X-ray
- Refer to Community Fracture Clinic.

Finger - 5th metacarpal:
- Consider appropriate analgesia +/- NSAID
- Check for angulation and rotation:
  - $<70^\circ$ with no clinical rotation:
    - Attempt reduction and alignment correction under haematoma or ulnar block
    - Apply POSI cast
    - Review post-cast X-ray
    - Refer to Community Fracture Clinic
      - If unsuccessful, direct admission to Emergency Department.
  - $>70^\circ$ with clinical rotation:
    - Attempt reduction and alignment under haematoma or ulnar block
    - Apply POSI cast
    - Review post-cast X-ray
    - Refer to Community Fracture Clinic
      - If unsuccessful in correcting rotation, direct admission to Emergency Department.

Toe - 1st:
- Distal phalanx (undisplaced and extra-articular):
  - Consider appropriate analgesia +/- NSAID
  - Crutches
- Proximal phalanx (undisplaced and extra-articular):
  - Below knee back slab with extension to cast to incorporate 1st toe
  - Review post-slab X-ray
    - If unsuccessful, call Orthopaedic Registrar (5470 6600)
    - If successful, review with usual G.P. in 1 week
    - Crutches, if required
- Non-reducible or intra-articular:
  - Call Orthopaedic Registrar (5470 6600).

Toe - 2nd to 5th:
- Consider appropriate analgesia +/- NSAID
- Reduce under digital block
- Splint by buddy strapping
- Review post-reduction X-ray
- Review with usual G.P. in 1 week.
Management of dislocations

Proximal Inter-Phalangeal Joint:
- Inability to extend finger post reduction of volar dislocation requires splinting in extension and referral to SCHHS Fracture Clinic
- Inability to reduce dislocation is for direct admission to Emergency Department

• Dorsal dislocation:
  - Consider appropriate analgesia +/- NSAID
  - Reduce under digital block
  - Splint in 30 degrees flexion with early mobilisation
  - Review post-reduction X-ray
  - Review with usual G.P. in 1 week
• Volar dislocation:
  - Consider appropriate analgesia +/- NSAID
  - Reduce under digital block
  - Splint in extension with early mobilization
  - Review post-strapping X-ray
  - Review with usual G.P. in 1 week

Management of tendon injuries

Skiers Thumb:
• Consider appropriate analgesia +/- NSAID
• Immobilise in thumb spica cast
• Refer to SCHHS Fracture Clinic

Central Slip Extensor Tendon Injury:
• Consider appropriate analgesia +/- NSAID
• PIP splinted in extension
• Discuss with orthopaedic registrar

Colateral Ligament Injury:
• Consider appropriate analgesia +/- NSAID
• Splint by buddy strapping
• Review with usual G.P. in 1 week

Jersey Finger (FDP Tendon Injury):
• Consider appropriate analgesia +/- NSAID
• Splint with DIPJ and PIPJ in 30 degrees flexion
• Discuss with orthopaedic registrar

Volar Plate Injuries:
• Eaton Types I to IIIa (<40% involvement of articular surface and <30 degrees flexion):
  - Consider appropriate analgesia +/- NSAID
  - Immobilise with a progressive block splint
  - Refer to Physiotherapist
• Eaton Type IIIb (>40% involvement of articular surface and >30 degrees flexion):
  - Consider appropriate analgesia +/- NSAID
  - Immobilise with a progressive block splint
  - Refer to SCHHS Fracture Clinic
Escalation triggers

Refer to the Emergency Department

If the patient has any of the following, please call the Orthopaedic Registrar (5470 6600) prior to referral to the Emergency Department:

- Inability to maintain proper alignment of fracture
- Intra-articular involvement >30%
- Non-reducible fractures or dislocations
- All displaced or intra-articular thumb fractures
- Neurovascular deterioration
- Any other serious clinical concerns not already listed.

Disclaimer:
This clinical pathway is a suggested guideline only, based on current evidence, and does not replace use of clinical judgement.

Governance for Safety and Quality in Health Service Organisations - Standard 1
Involves setting direction, making policy and strategy decisions, overseeing and monitoring organisational performance and ensuring overall accountability for a service.

Service Delivery - Standard 11
Patients and the community have access to safe, high quality healthcare services that are appropriate, effective and meet their needs.

Provision of Care - Standard 12
The intention of this standard is to ensure high quality care is delivered to consumers/patients throughout the care continuum.