# Hand Therapy Guide (VI)



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This is a quick reference to guide you on referrals for common hand injuries and conditions in general practice. The theme for this issue is **Metacarpal Fractures.** 

#### **Metacarpal Fractures**

#### Mechanism of Injury

Injury usually occurs from falling on an outstretched hand, or a direct blow to the hand or metacarpal heads from punching something.

## Symptoms

Metacarpal fractures are often associated with pain of the surrounding soft tissue, swelling and bruising. These fractures can often lead to permanent changes to the shape of the bone and hand such as loss of knuckle definition.

#### > Diagnosis

Often patients can still move their fingers with metacarpal fractures so it is important to get an x-ray to confirm the diagnosis.

Metacarpal head fracture (left) *Metacarpal neck fracture (right)* 

## > Referral

Refer patients as early as possible once diagnosis has been confirmed or post surgery.

#### Management

Fractures are managed depending on what part of the bone is fractured, the type of fracture pattern and how severe the fracture is.



- A custom-made thermoplastic hand or hand and wrist splint is usually required for 4-6 weeks.
- Buddy strapping to the unaffected radial digit to prevent a rotation deformity.
- Early oedema management and mobilisation of unaffected joints to prevent stiffness.
- Personalised exercise program to regain movement and strength after removal of the splint/cast.
- Advice regarding precautions during different stages of rehabilitation.

#### **Post-Surgery**

- Wound care including dressing changes and removal of sutures.
- Oedema management.
- Scar management to minimise adhesions and tethering of the extensor tendon to the plate.
- Early mobilisation of the hand and wrist.
- Grip strengthening from 6-8 weeks post surgery.

#### > Splinting

The splint design depends on the location and fracture pattern as well as stability of the fracture. The splint design is discussed in consultation with the treating doctor.



*Thumb metacarpal fracture splint Metacarpal fracture brace* 



Next issue will be about Dequervains Tendinopathy.





A custom-made thermoplastic metacarpal brace is usually required for 6 weeks.



