



Metacarpal Fractures

The metacarpal bones are the long bones of your hand between the wrist joint and the fingers.

Fractures to these bones are common (40% of all hand fractures). They usually occur following an accidental fall or a direct blow to the knuckles.

Fractures can occur at the head, neck, shaft or base (refer to image). The head and neck are the most common parts of the bone to break.

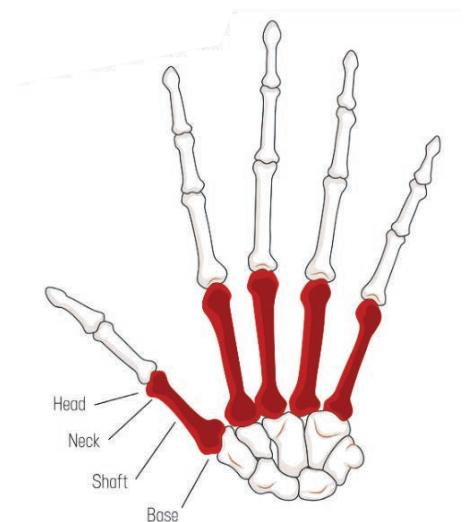
The bones are surrounded by many types of soft tissues including ligaments, muscles, tendons, nerves and blood vessels. These structures can also be injured and contribute to the pain.

You should visit a hand therapy practitioner who has expertise in fingers, hand, wrist, elbow and shoulder – to be assessed and treated. Fractures of the metacarpal bones can lead to permanent changes in the shape and function of the hand if not correctly managed.

Symptoms

Symptoms include pain, bruising and swelling.

It is common to be able to move a finger even when it is fractured.



How can hand therapy help?

A metacarpal fracture may be:

1. **simple** – a fracture that does not require surgery), or
2. **complicated** – when more than one part of the bone is fractured or the bone has moved too far from the normal position.

A hand therapy practitioner will make a custom-made splint (thermoplastic orthosis) or a cast made from plaster or fibreglass to immobilise the affected part of the hand or finger. They will also assist with a personalised exercise program and swelling management, wound care and scar management.

A complex fracture may require manipulation under anaesthetic, or surgery to put the bones back into a better position. Surgery is not common and only happens in 5 per cent of cases.

Recovery

Non-complicated metacarpal fractures are immobilised for 4-6 weeks to recover.

Complex metacarpal fractures involve approximately 3 weeks of immobilisation with a personalised exercise program. As healing progresses, the splint or cast can be removed more frequently for light exercise and activity. Usually, after 6 weeks the splint or cast is removed and activity increases including a strength program. It usually takes 12 weeks to return to sport or heavy lifting. Driving is usually possible after 6 weeks.



To find an Accredited Hand Therapist visit ahta.com.au or email enquire@ahta.com.au.