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Advice for Metacarpal Hand Fractures (Undisplaced) Hand Therapy

You have broken one of the metacarpal bones of the hand. This type of fracture is usually stable and heals well without long-term complications. Surgery is very rarely required.

The fracture is treated initially with strapping to the next finger either with tape or a fabric splint. This helps reduce pain whilst allowing movement, which is important for the recovery of function. Some people may be advised to also wear a wrist splint, depending on the exact location of the fracture.

We advise that you wear the strapping for two to three weeks, until it is more comfortable and easier to move.

To apply strapping, follow these steps:

- Place a piece of gauze between the two fingers to be strapped.
- Apply strips of tape between the knuckles so that the joints can still bend (if you are allergic to Elastoplast ask your nurse, therapist or pharmacist for alternatives)
- Apply strapping tape firmly, but not so tight that it cuts off your circulation
- Do not let your fingers twist or overlap each other.
- Alternatively, you may have been provided with a finger sleeve.



Most people find that the fracture is healed, and hand function is satisfactory by about six weeks after injury; however, it can take several months for grip strength to feel normal.

In the long-term you are likely to have a lump the fracture site and a less prominent knuckle. The finger may appear a little shorter than before. Despite this, your hand function is likely to return to normal.

If you are concerned that your hand is not recovering properly, please see your GP for advice.

Swelling and Pain

Your hand may be bruised and swollen after injury; applying a bag of frozen peas or ice can help with swelling and pain. Place ice in a plastic bag and wrap in a damp towel to protect your skin. Apply three to four times per day for 5-10 minutes at a time.

Elevating the hand above heart level can also improve swelling. Simple over-the-counter painkillers taken regularly are usually adequate. Ask your local pharmacist if you need further advice.

Movement

It is important to start early movement of the finger to prevent stiffness and enable return to normal use.

We recommend regular bending and straightening of the fingers whilst in the strapping or splint. This movement will become easier as the pain and swelling settles down. When the finger is comfortable start the exercises below (two to three weeks after injury):

Aim to complete the following a minimum 4 x day, with a 10 second pause for each move, for at least 5 repetitions. You can do them more frequently if able, for example you may like to set an alarm on your phone for every 1-2 hours.

1)

2)

3)

4)

5)



- 1) Straighten the fingers
- 2) From straight, bend your knuckles into the position above
- 3) From straight, curl your fingers into a hook
- 4) From straight, make a flat fist as above
- 5) From straight, make a full fist

Rehabilitation Plan

0 to 2 Weeks

Wear your strapping for comfort and support strapping should not cover the knuckles/joints.
Bend and straighten fingers regularly throughout the day with the strapping in place.
Your hand will need to rest, using it for light activities.

2 to 6 weeks

Avoid heavy lifting or pushing through the hand for six weeks.
Stop using the strapping once the pain has settled.
Continue with the exercises until you have your full range of movement.

6 to 12 weeks

Resume normal, day-to-day, activities but be guided by any pain you get.
Heavy tasks may still cause some discomfort and swelling.

12+ weeks

If you are still experiencing significant pain and stiffness, then please contact your GP.