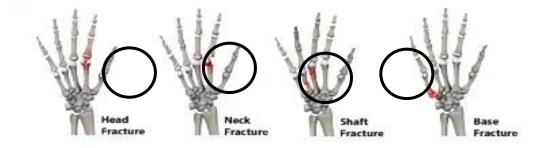




# **Metacarpal Fracture(s)**

## **Patient information factsheet**



- You have a fracture to one or more of your metacarpals (bones in your hand).
- This leaflet provides guidance for the management of your injury. Information provided from the Emergency Department or Virtual Fracture Clinic should explain your type of injury.
- As the bone heals, a lump may form over the fracture.
- If you have a 'head/neck' fracture of the metacarpals (in your hand), your knuckle might not look the same as before your injury.
- These **should not** cause any movement problems with your hand.
- When clenching your fist, if you notice your injured finger crossing another finger, or sticking up, please contact the Virtual Fracture Clinic for further assessment.

### Treatment

- **Healing:** It normally takes about six weeks to heal. If you have been given a splint, this is for comfort and doesn't affect the rate of healing.
- **Managing pain and swelling:** It is advised to take paracetamol or ibuprofen as necessary or as able. It is important to take painkillers at the recommended dose and to take them regularly every 4 to 6 hours, preferably to overcome a flare-up of your pain or help get you through an upcoming activity.

Don't wait until your pain is severe before you start taking painkillers, as they won't work as well. If a 2-week course of over-the-counter painkillers does not work, ask your GP or pharmacist for advice.

• **Apply an ice pack** for 10-15 minutes. The ice pack should be wrapped in a towel and placed directly onto the hand. If you do not have an ice pack, you can use a bag of frozen peas wrapped in a towel. This may help in the first few days of injury.



- If the swelling continues, bathe the hand in a bowl of warm water for thirty seconds to one minute and then in a bowl of cold water for thirty seconds to one minute. Repeat these five to six times. Alternating between the temperatures can help.
- **Using your hand:** It is important to use your hand as it will stop it from getting stiff. Use it as much as the pain allows. Start with light activities (washing and dressing) and increase gradually, as the pain gets better.
- **Follow-up:** As these injuries usually heal well, follow-up appointments with Orthopaedics are generally not needed. However, you will be referred to the hand therapy service. They will help you with your recovery, to regain movement and strength.

Weeks post injury	Plan
0-2 weeks	✓ Use the strapping and splint (if provided)
	<ul> <li>Move fingers gently to prevent stiffness – see initial exercises.</li> </ul>
2-6 weeks	<ul> <li>Remove the strapping when pain settles and stop using the splint if you were issued one.</li> </ul>
	$\checkmark$ Start doing your normal activities as pain allows.
	✓ Progress to additional exercises.
	<ul> <li>Avoid heavy lifting tasks (no more than a cup of tea) and contact sports.</li> </ul>
6-12 weeks	$\checkmark$ The injury has healed. Swelling however can last for several months.
	<ul> <li>Avoid heavy lifting and contact sports for up to 8 weeks. Increase activity gradually using pain as a guide</li> </ul>
6+ weeks	✓ If you are still experiencing significant pain and swelling, then please contact the Virtual Fracture Clinic or your Hand Therapist for advice

### Application of Buddy Strapping or a Beford splint (if applicable)

• Sometimes this type of injury requires some support. This can be in the form of buddy strapping or a Bedford splint. Both are suitable for your injury.



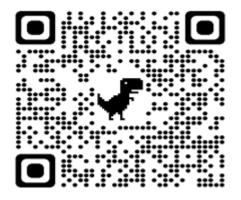
Strapping



**Bedford Splint** 



• Open your phone camera and place over the QR code to be taken to our video on how to apply buddy strapping.



- If your hand has been buddy strapped, you will need to change the padding and tape daily. Follow these instructions:
  - Padding should be placed between the two fingers to prevent rubbing and any breakdown of the skin. Ideally, the padding should extend almost the full length of the shorter finger.
  - Place one piece of tape between the first and second finger joints and another between the second and third. This allows the injured finger to flex or extend and can still be used to grip.
  - If your finger starts changing colour, or you begin to get pins and needle sensations, the strapping is too tight, and you need to loosen it.
- You may also wear a wrist splint to the injured hand and wrist in conjunction with Bedford splint or buddy strapping to support and recovery (see below): This will be advised by Orthopaedics or a Hand Therapist.

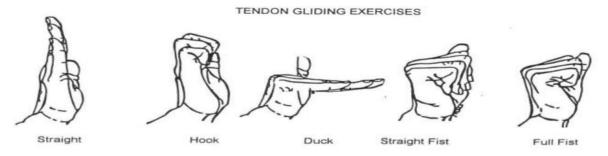






### **Exercises**

- **Initial Exercises:** The following exercises should be performed slowly and regularly every day. They are called 'Tendon Glide' exercises, and they help you to regain full movement.
- You must do them 5 to 10 times, every two hours.
- Keep the buddy strapping or Bedford splint on until advised by the Hand Therapist.
- You might experience pain, swelling and bruising. This is normal and might make your movements difficult.
- Work your way through the movements, as shown in the pictures below, ending with straight fingers again. If exercises are painful, then increase the number of repetitions gradually.



Move your hand from one position to the next, to stretch and glide the tendons. This will help improve the movement of your hand and fingers.

Hold each position for 2-5 seconds. Complete 5-10 repetitions, 5-6 times a day.

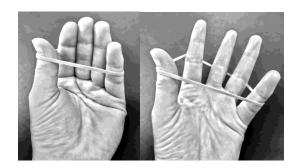
### **Strengthening exercises**

- Using soft putty, slowly and gently begin your strengthening exercises. Begin four weeks after your fracture.
- The following pictures show different putty grip exercises. Start with five squeezes for each exercise, holding for a couple of seconds. Rest for two minutes before completing a further set. If you can, increase the number of repetitions for each exercise.





• Use an elastic band around your fingers to strengthen the muscles in the hand. Do 5 to 10 repetitions. Rest before completing another set.



### **Smoking cessation**

• Smoking makes healing time longer, and in extreme cases, can stop healing altogether. Stopping smoking will help your fracture recover.

For advice on smoking cessation and local support available, please refer to the following website: <u>http://smokefree.nhs.uk</u> or discuss this with your GP.

### **Return to Work and Driving**

- You can return to work when you feel you can manage physical tasks in your job.
- Before driving, you must make sure that you meet DVLA guidelines.
- You must be able to grip the steering wheel, perform an emergency stop safely and not be limited by pain. If this is not possible, DO NOT DRIVE.
- Check with your insurance company in case your policy is affected.

### **Disclaimer**

- Not all these exercises are suitable for everyone.
- While every precaution has been taken in selecting these exercises, they do not come without risks.
- If you have any concerns regarding your injury, or whether you should be doing the exercises, you should consult your treating doctor or Hand Therapist before beginning any exercises in this leaflet.



 The exercise plans shown in this leaflet are designed to be used as a guide and a point of reference; they can be changed and progressed under the supervision of your Hand Therapist.

\*Guidelines taken from NHS England

Patient advice and liaison service (PALS)

If you have a compliment, complaint or concern please contact our PALS team on 020 7288 5551 or <u>whh-tr.PALS@nhs.net</u>

If you need a large print, audio or translated copy of this leaflet please email <u>whh-tr.patient-information@nhs.net</u>. We will try our best to meet your needs.

Twitter.com/WhitHealth Facebook.com/WhittingtonHealth

Whittington Health NHS Trust Magdala Avenue London N19 5NF Phone: 020 7272 3070 www.whittington.nhs.uk

Date published: 12/02/2024 Review date: 12/02/2026 Ref: EIM/OT/MCFs/01

© Whittington Health Please recycle

