

Metacarpal (Hand) Fractures
Orthopaedic Department
Patient Information Leaflet

Under review

Metacarpal (Hand) fractures

Welcome to the Dudley Group NHS Foundation Trust Fracture Clinic. This leaflet will provide you with information regarding what to expect following a Metacarpal (Hand) fracture. It will describe some of the possible signs and symptoms and treatment you will be given.

Introduction

There are 5 Metacarpal bones in each hand, these connect the wrist to the fingers and thumb.

Common causes are falls, sports injury, road accidents and fighting. Any one of the Metacarpal bones can be broken and sometimes more than one is broken.

Signs and symptoms

You may experience the following:-

- Pain
- Swelling and / or stiffness mostly over the injured area
- Bruising

What treatment will I receive?

Conservative (non surgical) treatment

In some circumstances

- You will need to have the bone straightened by having a local anaesthetic and you will have a plaster cast applied. You will be given written and verbal information about how to look after your plaster cast.
- A plaster cast may not be required so in this case you will have a 'buddy strapping' applied to the affected finger adjacent to the unaffected finger in order to restrict finger movement and help it to heal.

Surgical Treatment

- Some patients may need an operation to fix the fracture/break. If an operation is required the doctor will determine if the finger is shortened because of the fracture. If it is the doctor may recommend surgery to restore normal length of the finger.
- If the finger is rotated (in an abnormal position) the doctor may recommend that this deformity gets corrected. The doctor will fix the broken bone with wires, plates or screws. The type of treatment depends on the specific type of fracture/break.

In some circumstances you may need referring to a specialist hand surgeon at the Queen Elizabeth Hospital, Birmingham.

What are the risks of surgery?

Surgery has various complications. There are possible complications that you should be aware of if you have an operation:

- Damage to nerves and blood vessels
- Infection
- The fracture fragments may fail to heal or heal in an unacceptable position

What problems may I encounter if I sustain a hand fracture?

Most hand fractures will heal without any problems. The two most common problems are

- Stiffness of the fingers/wrist. Finger stiffness is prevented by moving them as soon as possible.

What should I do to help my wrist?

- If your wrist is swollen or achy, then soak it in a bowl of warm water will help.
- Massage regularly with oils or hand cream directed over the wrist and towards the elbow.
- If the hand and arm are swollen then elevate on pillows and keep the fingers moving.
- Aim to use your wrist as normally as possible.
- To prevent the shoulder and elbow from stiffening, keep them moving.
- Follow the recommended exercises below to regain any loss of movement. Remember these exercises are in order of easy to advanced so work through at your own tolerance. Aim to complete the whole sheet at the end of one month.

Further Information

If you have any concerns / problems please speak to a member of staff or contact the Fracture Clinic at Russell's Hall Hospital on 01384 456111 extension 2220 the department is open Monday to Friday between the hours of 8.30 to 5pm.

Exercises

You will be advised to move your hand as much as possible, to avoid any stiffness and restore function as quickly as possible.

The purpose of these exercises is to provide you with the correct advice on how to return your wrist to normal once the cast has been removed. The exercises should be performed little and often and progressed at your own tolerance.

Exercise 1

Fully flex your wrist – Try to flex your wrist even more. Hold for 30 seconds.

Exercise 2

Fully extend your wrist – Try to extend your wrist even more. Hold for 30 seconds.

Exercise 3

Rest your forearm on a table, palm turned down. Alternatively turn palm up and down keeping elbow straight.

Exercise 4

Hold fingers and wrist straight. Bend wrist first towards the little finger and then towards the thumb.

Exercise 5

Support your elbow on a table with your wrist straight and your fingers pointing towards the ceiling.

Make a fist (thumb over fingers). Straighten your fingers and bring them apart.

Exercise 6

Put the back of your hand on a table.

Bring your thumb to the base of your little finger. Bring your thumb back.

Exercise 7

Place the palm of your hand on a table.

Bring your thumb away from the index finger and then back again.

If you have any problems during this treatment episode please speak to the doctor or nurse in clinic.

Under review

This Information can be made available in large print, audio version and in other languages, please call 0800 0730510.

ਜੇਕਰ ਇਹ ਲੀਫਲੈੱਟ (ਛੋਟਾ ਇਸਤਿਹਾਰ) ਤੁਸੀਂ ਆਪਣੀ ਭਾਸ਼ਾ (ਪੰਜਾਬੀ) ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਕ੍ਰਿਪਾ ਕਰ ਕੇ ਪੇਸ਼ਟ ਇੰਫਰਮੇਸ਼ਨ ਕੋ-ਆਰਡੀਨੇਟਰ ਨਾਲ **0800 0730510** ਟੈਲੀਫੋਨ ਨੰਬਰ ਤੇ ਸੰਪਰਕ ਕਰੋ।

यदि आपको यह दस्तावेज़ अपनी भाषा में चाहिये तो पेशन्ट इनफरमेशन को-आरडीनेटर को टैलीਫ਼ोन ਨੰਬਰ **0800 0730510** पर फ़ोन करें।

જો તમને આ પત્રિકા તમારી પોતાની ભાષા (ગુજરાતી)માં જોઈતી હોય, તો કૃપા કરીને પેશન્ટ ઈન્ફોર્મેશન કો-ઓર્ડિનેટરનો **0800 0730510** પર સંપર્ક કરો.

আপনি যদি এই প্রচারপত্রটি আপনার নিজের ভাষায় পেতে চান, তাহলে দয়া করে পেশেন্ট ইনফরমেশন কো-অর্ডিনেটরের সাথে **0800 0730510** এই নম্বরে যোগাযোগ করুন।

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حسب ضرورت اس ایف ایٹ کو اپنی زبان (اوردو) میں حاصل کرنے کے لئے برہم پرائی ٹیلیفون نمبر **0800 0730510** پر ویڈیٹ انٹرنیشنل کو اور ایمل پر (مریٹوں کے لئے معلومات کی فراہمی کے سلسلے میں اس کے ساتھ رابطہ قائم کریں۔

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