

Fractured wrist treated in cast

Introduction

A fractured (broken) wrist usually occurs as a result of a fall onto an outstretched hand. Either one or both of the forearm bones (radius and ulna) can break. Soft tissues of the wrist that are attached to the bones can also be damaged.

Treatment without surgery

Most commonly this injury can be treated successfully without surgery. This involves wearing a plaster cast below your elbow for four to six weeks. Your wrist may need to be *manipulated* by the doctor before the plaster is put on, to allow it to heal (set) in the right position. You will be told if this is necessary.

The purpose of the plaster is to reduce pain by *immobilising* the wrist. This immobilisation allows the bones to heal and join together again where they have been broken. When you initially sustain the injury you will have a partial plaster. This does not go all the way around your wrist and forearm, which is important to allow for the swelling that occurs. This will be replaced by a full cast once the swelling has settled. You may require further x-rays to ensure that your wrist remains in a good position.

During the COVID-19 pandemic, in an effort to minimise hospital visits and protect you from avoidable exposure, a decision may be taken to use a full cast immediately as a strategy to avoid the 1-week check. Occasionally these full casts are made in a manner that allows you to remove it yourself. This should only be done if you have been instructed to do so it has been made clear to you when the cast is to be removed. Further information and a video demonstration of this can be found on the UHCW Hand Unit website (www.tinyurl.com/uhcwhand).

Symptoms

- **Pain** – when the bones of the wrist are broken, this causes pain. This usually requires taking pain killers as recommended by your doctor in addition to immobilisation, and the pain will settle quickly with time after the injury. Increasing pain despite immobilization and regular pain medication is a red flag, and you should seek further help. It may take up to four to six months for the wrist to feel reasonably *normal* after the break, but improvements in pain and function may continue for up to 2 years.
- **Swelling** – the wrist joint will swell after injury due to the damage to the tissues. During the first two weeks after injury it is very important to raise your hand and wrist in the sling given to you, to help reduce this swelling. Avoid letting your swollen hand *hang down* as this will make the swelling worse. Try to keep your fingers gently moving during this time also, while you have a plaster on.
- **Deformity** – occasionally the wrist joint can look a slightly different shape when it has healed due to bones ‘resetting’ in a slightly different alignment.
- **Stiffness** – the fingers and wrist joint can easily become stiff after this injury due to tissue damage and swelling. *For this reason it is very important to do the exercises shown whilst you have the plaster on.*

Caring for your plaster

- **Do not cut** your plaster – always come back to A&E if your plaster needs trimming.
- **Do not wet** the plaster. Cover the plaster with a plastic bag or cover when in the bath or shower. You may decide to self-source an approved cover for your cast to make them water proof from LimbO (www.limboproducts.co.uk).
- **Do not poke** anything down the plaster as you may cut your skin or cause a wound to become infected.
- **Do** use your hand as normally as possible for light activities such as eating and dressing but avoid heavy lifting.

Exercises

These exercises are important, as they will make sure your unaffected joints do not become stiff and will help maintain good circulation in your arm, which will help with fracture healing. *Try to do these exercises four times each day.*

PATIENT INFORMATION LEAFLET

1. Shoulder – standing or sitting in an upright position, slowly lift your affected arm up towards the ceiling (elbow straight) and then lower again. Repeat 5 times.
2. Elbow – sitting in an upright position, slowly bend your affected elbow so your hand moves towards your shoulder and then fully straighten your elbow. Repeat 5 times.



3. **Thumb** – bend the thumb joints as far across the cast as possible towards your little finger, then straighten it as far as possible



4. **Fingers (fist)** – start with all your fingers straight and then bend all your fingers to make a fist.



PATIENT INFORMATION LEAFLET

5. **Fingers (salute)** – start with all your fingers straight and then bend the knuckle joints of all your fingers, keeping the fingers straight.



6. **Fingers (hook)** – bend the joints of your fingers whilst keeping your knuckle joints straight, forming a 'hook' position and then straighten the fingers.



How long will I be off work and when can I drive?

This depends on your job. In general terms, your wrist will take six to eight weeks to heal fully and during this time you will be unable to lift heavy items or do heavy manual work. However if you can do office-based duties you can potentially return to work with your plaster on before this time. Please speak to your insurance company with regard to driving for their regulations, but the most important consideration when driving is safety. You must not drive under any circumstances until you have no distracting pain, you are confident that you are in control of the vehicle at all times, and be able to perform an emergency stop competently.

Hand Therapy

Your wrist will be stiff after your injury, particularly if it has been in plaster. During the time of wearing the plaster and afterwards, it is very important that you work on the exercises given above to help to get over this stiffness. It is helpful to perform each of the exercises shown 10 times, and repeat them four to five times per day. Do the exercises as far as pain allows and not beyond. Your range of movement will improve gradually with time after your treatment. After the cast is removed it is not necessary to routinely refer you for physiotherapy if you follow the exercises below.

PATIENT INFORMATION LEAFLET



Push both palms together and lift your elbows up as far as comfort allows, until your forearms are parallel to the floor. At first it will be hard to get your palms together completely, but this will improve and you will then be able to bring your elbows up higher.



Put the backs of your hand together and lift the elbows as far as comfort allows.



With the elbows tucked into your side, turn your palms up towards the ceiling as far as discomfort allows. It is normal to feel a pulling or tightness sensation.



Keeping arms into the side as above turn your palms towards the floor.

Complications

- Stiffness
- Pain syndrome
- Tingling or numbness



PATIENT INFORMATION LEAFLET

Further information

The day surgery unit can be contacted on 02476 966861 / 02476 966868 (University Hospital), or on 01788 663264 (Hospital of St. Cross). For further information please visit our hand service's web site at www.tinyurl.com/uhcwhand, or contact:

- Hand Therapy at University Hospital Coventry & Warwickshire on 02476 966016
- Hand Therapy at Hospital of St. Cross, Rugby on 01788 663257
- Our specialist hand surgery nurse / hand-coordinator on 02476 965072

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 02476 966861 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

Document History

Author	Lynne Nicholls, Michael David
Department	Hand Therapy
Contact Tel No	26861
Published	April 2020
Reviewed	
Review	April 2022
Version	1
Reference No	