Wrist fracture

We are sorry that you have had a fracture around your wrist and we want to make sure you have the best possible result. You will see a specialist in the fracture clinic and here is some general information to help you plan things for the next few days and weeks.

Facts

- The radius is the most commonly broken bone in the body.
- Most fractures of the radius heal in five to eight weeks.
- You will need to be in plaster for a few weeks
- We only operate to improve the position of the broken bones.
- It is possible to take Xrays through the plaster to check the position.
- It is important to keep the fingers moving. Try to move all the joints in every finger frequently during the day. Take painkillers if you need to. Otherwise your fingers will get stiff.
- After you come out of plaster, you should avoid lifting anything heavy or risky (eg a hot kettle) for a month. It can take time (months) to get the strength and movements back.

Plaster

- Keep the plaster dry.
- Do not put any objects inside the plaster.
- Return if your fingers are blue or white or if the plaster feels excessively tight.

Things you should do

- Elevate. Ideally you would have your fingers above your heart - practice with pillows.
- Bend and straighten every joint in every finger and the thumb frequently during the day. Fingers get very stiff if not moved. Moving also reduces swelling.
- Take painkillers if you need to. You may need more in order to keep fingers moving.
- Try to get some sleep
- Eat well. Vitamin C may reduce the risk of pain syndromes. Protein helps bones heal.
- Try to rearrange your activites. Having a fracture is very frustrating, but you do not want to compromise your fracture healing.
- You may want to have baggy Tshirts, and track suits rather than zips and buttons.
- Perhaps try microwave meals or prepared food rather than trying to peel vegetables.
- You should not drive. Work out how little you can do. Can you get a lift somewhere?
- Drop your standards, just for a few weeks!
- Many supermarkets will deliver. You can order on-line and pick a delivery time. If you cannot order on-line yourself, someone in the family can do this for you (from anywhere) to arrive at your address, if you tell them what you want and when you want it.
- A sling is only used to elevate the hand for the first few days to reduce swelling. If it pulls on your neck or stops you moving your fingers, please find another way of elevating the hand (eg on pillows).

Types of pain relief

Most types of painkillers can be bought over the counter. A pharmacist may give you advice.

- Paracetamol. No more than 4 grams (8 of the 500mg tablets) per day for an adult. Beware – “co-codamol” and similar medication contains paracetamol, so you must take fewer paracetamol tablets.
- Opiate-based = codeine, “co-codamol”, oxycontin, etc. These can make you constipated, so take a laxative or plenty of fruit and vegetables.
- Anti-inflammatories (ibuprofen, dicolofenac, brufen, etc). If you take them, you must do so with food. Anti-inflammatories can cause problems in some people with stomach ulcers, allergies, asthma, or kidney problems. They can reduce bone healing, so avoid them if you have had an operation using a “bone graft”

Elevating the arm and moving the fingers can reduce pain and swelling.

Fracture clinic

The fracture clinic runs every weekday. It is adjacent to the casting department, and has an integral dressing clinic, for open injuries, wounds and stitches.

You will see an Orthopaedic Consultant, Specialist Registrar, Specialist Doctor or practitioner with experience of all different types of fractures. They will be able to plan current and future treatment with you. There is a very experienced team including nurses, radiographers (who take Xrays) admin staff and Orthopaedic Practitioners, who can fit splints and change or complete plasters.

If the fracture position is such that it needs intervention (manipulation, operation, plaster, Xray), we can talk to you and arrange this from the fracture clinic. Please ask us if you need a sick note. (You can usually self-certify for the first seven days). We do not give painkillers in the fracture clinic.

Treatment possibilities, options and decision-making

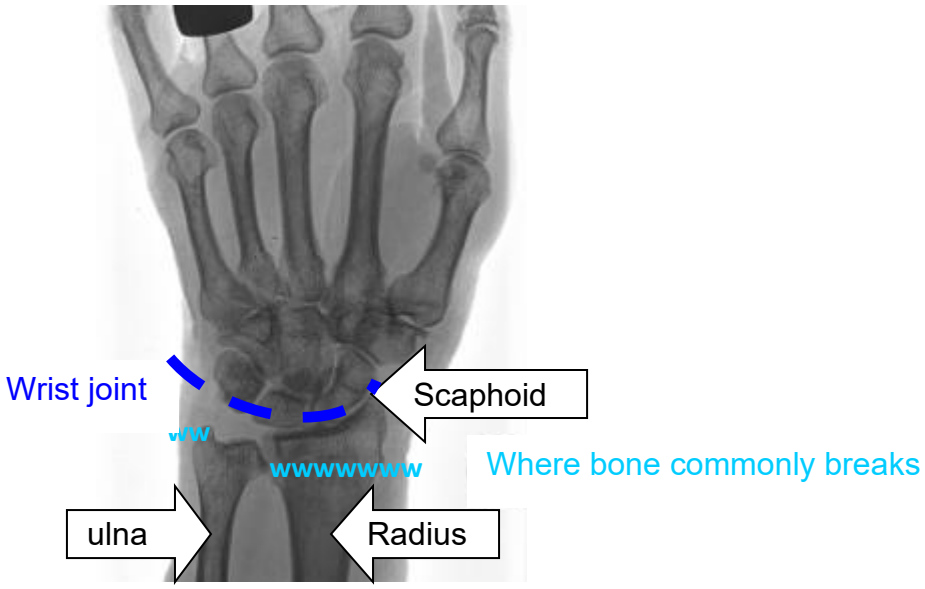
Most fractures are treated in plaster. The fracture would unite in the postion it is in.
If the position is unacceptable we may operate in order to put it into a better position, and then hold it there (with plaster, K wires or plate and screws). Common reasons for operating are: angulation, rotation, shortening or a step in the smooth joint surface.

We may wait a few days to decide. We may re-Xray after a few days, as the position of the fracture may change as the swelling goes down.

It is possible to operate to improve the position for up to three weeks after a fracture. After a manipulation, it is a good idea to get an Xray through the plaster within a week, in case the postion has slipped again.

Bones which may break (see picture):

- Radius - this commonly breaks where you might wear a watch
- Ulna - (bone on little finger side) often the tip of this breaks off, so it is more prominent.
- Scaphoid - (a small kidney-shaped bone) - a fracture of the scaphoid is not always apparent at first, the blood supply can be poor and they can be slow to join.
- The wrist is the joint where there is movement between the radius + ulna (on the forearm side) and the scaphoid + other bones (on the hand side)



Operation

If your fracture is the kind that would do better with an operation, we will arrange:

- Consent - you will sign a consent form, but can ask questions at any time
- Time of surgery – there is no need to rush to fix fractures immediately. A team of 10 trained individuals is needed to do this type of surgery (surgeon, anaesthetic doctors, radiographer, Operating Department Practitioner or scrub nurse, surgical assisant, runner, recovery nurse or practitioner, etc). It is better for this surgery to be planned with the team prepared.
- We commonly ask you to come on the day of surgery at 7.30am. If you are having a General Anaesthetic:
    - You should not eat anything for **six hours** before surgery
    - No chewing gum, no milk, no sweets for **six hours** before surgery
    - You may drink clear fluids (black tea, black coffee, water, squash without bits in) until two hours before surgery. For a morning operation, “clear fluids” until 6.30am
- Before surgery, we will check whether you are carrying MRSA by taking swabs
- Before surgery we will check your fitness, usually with a ”Pre-operative Assessment”
- After surgery, you should elevate the hand.
- After surgery, you should keep the fingers moving otherwise they will get stiff.
- You will ususally be given a post-operative fracture clinic appointment within one or two weeks (to check wound or position) or 6 weeks (to finalise the fracture).

Osteoporosis

Osteoporosis means bones of low density (= weak bones). Many people get this especially as they get older without realising until a bone breaks with little trauma. Your fracture will heal just as quickly whether you have osteoporosis or not. The following advice is to prevent future fractures, not to help your current fracture.

If you have the kind of bones where a fracture happens with little trauma, you should see if there is anything you can improve to make your bones stronger. This may prevent a hip fracture in a few years, or spinal wedge fractures.

- Smoking reduces bone density. For advice on smoking cessation and local support, please refer to the following website: **http://smokefree.nhs.uk** or discuss this with your GP.
- Exercise improves bone strength, muscle strength and reaction times. (Walking every day, cycling, stair-climbing, yoga and Tai chi are good.) Keep moving!
- Sunlight helps your body make vitamin D. Many people are deficient in vitamin D and have weak bones and painful muscles because of this. (If you are out more than one hour: wear a hat and/or sunscreen to protect you from sunburn and skin cancers.)
- Excessive alcohol makes bones weak. Try a glass of soft drink between alcoholic drinks or limit the times when you drink alcohol or the amount you drink each occasion.
- Some patients need medication to improve bone strength. Your doctor may recommend this to prevent future fractures, especially if you are on steroids, have low mobility or have severe or obvious osteoporosis.
- Your GP may recommend a test. But the test will not help on its own. You should improve whatever you can (eg increase activity level) as people whose Dexa scan is “normal” can still break their hip. On **www.shef.ac.uk/FRAX** you can calcuate your risk.

Explanation of terms

M.U.A.	Manipulation Under Anaesthetic
K-wiring	Putting wrist in good position, then placing wires across it. The ends of the wires are outside the skin (covered up by the Plaster). We remove K wires in the Fracture clinic, after a few weeks when the fracture joins
O.R.I.F.	Open Reduction and Internal Fixation (Plate and screws). This is often used for fractures into the joint, to get a good position.
Fracture	= break. In engineering, these terms are different because a fracture has not displaced. In Orthopaedics, “fracture” and “break” mean the same: even if a fracture is undisplaced it may be unstable and need plastering or operating on to prevent it uniting in the wrong position.
P.O.P.	Plaster of Paris (you are likely to be in plaster for five or six weeks)
Backslab	A partial plaster holding the fracture while there is a risk of swelling.
Completing a plaster	Putting more plaster over a backslab when the swelling has reduced. (this keeps the same position, eg if the arm had a Manipulation).
Changing a plaster	Removing the backslab and putting a whole plaster on. This is lighter.
Xray	We can take Xrays through the plaster, to check the position
Greenstick	Child’s fracture where bone bends
Colles fracture	Commonest type of wrist fracture where the bone bends upwards
Ulnar styloid fracture	Tip of the ulna bone, often occurs with a fracture of the radius

Advice after the cast is removed

When the cast removed it is important to try and use your hand and wrist. Start with light activities like fastening buttons, washing your face, eating, turning the pages of books over etc. Progress to heavier activities e.g lifting a kettle, carrying a bag of shopping etc as pain allows. By three months after the fracture you should find you can manage most day to day tasks, however it is likely your wrist will continue to improve for at least 1 year following your injury.

You may have been given a wrist support to wear. Unless you have been told otherwise, wear this to allow you to use your hand for tasks like housework and then remove for lighter activities and when at rest. For the first few days, you may find it more comfortable to sleep with your wrist in the splint. Gradually wean yourself out of the splint after a few weeks.

Managing swelling and pain after the cast is removed

Try to avoid your hand hanging down, encourage your hand to 'join' in with activities. Not using your hand (or overusing it) can increase swelling.

Bathing your hand in warm water for 10 mins can be helpful. Activities such as washing-up and polishing can be helpful.

Exercises to regain movement and strength after the cast is removed

Try to do exercsises three to four times a day, to regain strength and reduce stiffness. It can be helpful to take painkillers.

1. Move fingers

2. Hold a gentle stretch for 10 seconds

3. Try turning your forearm over and back again:

4. Try massaging your hand and wrist with a firm motion. Some people prefer to use any cream or oil for this.

Further information

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or Specialist Orthopaedic Care Practitioner.

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the patient experience team on 0300 131 4784 or esh-tr.patientexperience@nhs.net.

Hand hygiene

We are committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of our leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department on 0300 131 4434 or esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

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References

Cochrane review (2015) Rehabilitation for distal radial fractures in adults - www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003324.pub3/full
NICE guidance CG146 (2017) Osteoporosis - www.nice.org.uk/CG146
BOA (2017) The Management of Distal Radial Fractures BOAST - www.boa.ac.uk/resources/boast-16-pdf.html

Information updated during the COVID-19 pandemic to ensure that patients with injuries have information, support and care despite social distancing.

The following clinicians have been consulted and agreed this patient information:Prof Scarlett McNally, Consultant Orthopaedic Surgeon

The directorate group that has agreed this patient information leaflet:
Diagnostic, Anaesthetic and Surgery – Orthopaedics

Next review date: September 2025
Responsible clinician/author: Prof Scarlett McNally, Consultant Orthopaedic Surgeon
This information is also available at: https://www.esht.nhs.uk/leaflet/wrist-fracture/