

# **Fractured Wrist/Hand**

Information for Patients

### What is a wrist fracture?

Wrists are the most commonly broken bones in the arm. Fractures of the wrist most commonly involve the radius and ulna — the two bones of the forearm.

The most common wrist fracture is a distal radius fracture, when the radius (the larger bone in the forearm) is fractured on the end, near the wrist. This often occurs when someone falls on an outstretched hand.

## Wrist and hand anatomy



#### **Removal of Cast**

Following your fracture, you may be required to have a period of immobilisation in a cast to allow the fracture to heal. When your Consultant thinks you are ready, they will allow this to be removed. It is important that you then complete some gentle exercises 3-4 times a day to prevent your hand and wrist from becoming stiff.

It is common for your hand and wrist to feel uncomfortable when your plaster cast is removed, and your skin may be dry and flaky. You may want to bathe your hand and wrist in warm water to help with this, as well as gently massaging the area with a plain/non-perfumed moisturiser. In addition to this, warm water can help to reduce your pain and can make movement feel easier. Therefore, doing some of the exercises below in the water or after a bath/shower may be a more comfortable way of doing the exercises.

## If you have had an operation for your fracture

It is important that you ensure your wound has completely healed with no open or wet patches and stitches should be removed before getting the wound wet. This is to minimise your risk of obtaining a post-operative infection.

If you experience any of the following please contact your GP or ED at RHCYP for review:

- Severe unrelenting or worsening pain
- Worsening hot/red/swollen wound
- Fever or temperature
- A wound that is oozing or smells.

#### What if I need pain relief?

To manage your pain and keep your hand and wrist moving it is advised that you initially take regular simple pain relief. This can be bought over the counter from a pharmacist. If you have any allergies or conditions which affect the use of pain relief or any questions or concerns, please seek advice from your GP or a pharmacist.

## Rehabilitation and Recovery

If you follow this advice leaflet your injury should take around 8-10 weeks to heal. However, everyone recovers from injuries at different rates and it is dependent on the severity of the injury, the soft tissue that was involved and the presence of any other medical problems.

Weeks since injury	Goals and expectations
0-4	You will likely be in a cast so during this stage it is important to keep your shoulder and fingers moving as best you can.
4-12	Once your cast is removed you can start to try and add in some gentle cardiovascular activity like swimming or walking as you feel able to as well as keeping other parts of your body moving like doing core stability exercises or lower body exercises if you feel able to.
	Try to start the initial exercises in this leaflet and carry them out regularly each day to get your wrist moving as best you can. You can progress to the more difficult exercises as soon as you feel ready to, they should feel comfortable and not increase your pain at all.
12 +	If you have followed all of the exercises within this guide and gradually built up your activity levels it is safe to start re-introducing more challenging activities such as gently returning to some sports activities and PE as you feel able to.
	You can also start adding in more sport specific activity as you feel able to and make a gradual return to training. Remember to always be guided by your elbow – a little bit of pain that goes away quickly is normally nothing to worry about but if you are experiencing high levels of pain that don't settle quickly or if your shoulder feels unstable in any way you should contact the physiotherapy dept on 0131 3121079.

#### **Initial exercises**

Try and start working through the following exercises as soon as you can – it is safe to start trying these exercises once your cast has been removed;



1. Sit or stand with the palms of your hands together, try and gradually work towards the position pictured by moving your hands up and down from your chin and down towards your tummy. This may feel stiff initially and will take some practice but should improve over time

Repeat 3x10 times, twice a day.



2. Sit or stand with the backs of your hands together, try and gradually work towards the position pictured by moving your hands up and down from your chin and down towards your tummy. This may feel stiff initially and will take some practice but should improve over time

Repeat 3x10 times, twice a day.



3. Sit or stand with your hands clasped together as pictured, practice turning your hands over and back so the back of each hand in turn touches the table.

This may be stiff and sore to begin with but keep practicing as will get easier.

Repeat 3x10 times, twice a day.



4. Practice squeezing a ball or clothes peg between your fingers, this will help strengthen the muscles in your hands and wrist if you do it regularly throughout the day.

Repeat 3-4 x10 every day.

## **Exercises progressions**

Start these exercises as soon as your movement has returned and your pain is starting to settle – start with a very light weight or a 500ml water bottle;



1. Practice throwing and catching a ball with your injured arm, either against a wall or with a partner.

Practice throwing at different hights and different speeds as well as overarm and underarm throws.

Try and see how many times you can throw and catch without dropping the ball.



## 2. Wrist extension with a small weight

Sit on a bench with your forearms supported on your thighs and wrists hanging over your knees. Hold a small weight or water bottle in both hands with your palms facing downwards and wrists in a neutral position (straight line from elbow to knuckles).

Gently lift the weight up and down by moving your wrist.

Repeat 3x10 times.



3. Wrist movement side to side with a small weight

Sit on a bench with your forearms supported on your thighs and wrists hanging over your knees. Hold a small weight or water bottle in both hands with your palms facing upwards and wrists at neutral position (straight line from elbow to knuckles).

Turn your hand and wrist over so your palm is facing downwards and then back to the start position

Repeat 3x10 times.



4. Hold the front end of a dumbbell with a straight arm.

Bend your wrist sideways so that your little finger approaches your elbow and the other end of the dumbbell raises. Lower the other end of the dumbbell and let your wrist bend back to the starting position.

Repeat 3x10 times each day.

## Return to sports and activity

Once your hand and wrist is no longer painful and the movement is much better you can gradually return to gentle activities.

As your shoulder continues to feel better you can gradually return to your usual activities like sports and PE ensuring you warm up and cool down fully.

If you feel as though you are able to, you do not have to wait for the go ahead from a health professional to return to your normal activities.

## Do I require further treatment?

If you have regained full movement at your shoulder, are able to use if for all normal activities pain free and don't have any feelings of instability you likely don't need any further assessment or treatment.

If you do have any concerns, ongoing pain or are struggling to return to your normal activities please call the physiotherapy department to speak with one of our physios and make a self referral.

#### Further advice

If you have followed all of the advice above and you are still struggling with your symptoms you can contact the physiotherapy department on details below.

Physiotherapy Team
Therapies Department,
Royal Hospital for Children and Young People,
50 Little France Crescent
Edinburgh
EH16 4SA

Telephone 0131 312 1079