What is a wrist fracture?

A wrist fracture is a break of one or both of the bones in your forearm near the wrist joint (see figure 1). A wrist fracture is sometimes known as a 'distal radius fracture' or a 'Colles fracture'.

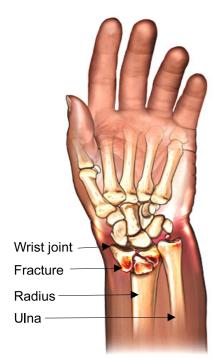


Figure 1 Wrist fracture

Your surgeon has recommended an operation to treat your wrist fracture. However, it is your decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you make an informed decision.

If you have any questions that this document does not answer, you should ask your surgeon or any member of the healthcare team.

How does a wrist fracture happen?

Many wrist fractures happen to elderly people when they fall with their hand stretched out. Wrist fractures can also happen to younger people.

Sometimes the fracture is just a little crack in the bone. However, the fracture can be more severe with the bone broken in many places and damage to the surface of the wrist joint.

What are the benefits of surgery?

The main benefit of surgery is to hold the pieces of bone in a good position while the fracture heals. This should help your wrist to work better.

Are there any alternatives to surgery?

Some wrist fractures heal well in a plaster cast. Before placing your wrist in plaster, you may need to have the bones pulled into a better position (called a manipulation). You will need a local or general anaesthetic. If your wrist is badly broken, the bones do not always stay in a good position in the plaster cast. If this happens, your surgeon may recommend an operation.

What will happen if I decide not to have the operation?

You may need to have a manipulation and then your wrist will be put in plaster. If the bones do not heal in a good enough position, you are more likely to have trouble with your wrist in the future.

It is usually only possible to perform the operation within about two weeks of the injury.

What does the operation involve?

The healthcare team will carry out a number of checks to make sure you have the operation you came in for and on the correct side. You can help by confirming to your surgeon and the healthcare team your name and the operation you are having.

A variety of anaesthetic techniques is possible. Your anaesthetist will discuss the options with you and recommend the best form of anaesthesia for you. You may also have injections of local anaesthetic to help with the pain after surgery. You may be given antibiotics during the operation to reduce the risk of infection.

There are several different ways of fixing a broken wrist (see figure 2).

- Wires placed through the skin.
- One or more plates fixed to the bone with screws.
- An 'external fixator' (using a frame and pins).

Your surgeon will discuss which option, or combination of options, is best for you.



At the end of the operation, they will close any cut in the skin with stitches or clips and put a bandage or plaster cast on your wrist.

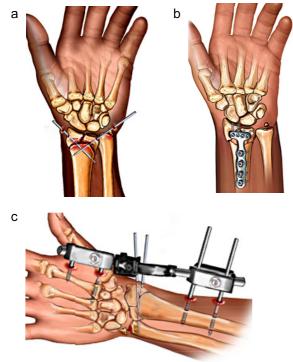


Figure 2

- a Wires
- b Plate and screws
- c External fixator

What should I do about my medication?

You should let your doctor know about all the medication you are on and follow their advice. This includes herbal remedies and medication to control diabetes and blood pressure. If you are on beta-blockers, you should continue to take them as normal. You may need to stop taking warfarin or clopidogrel before your operation. Anti-inflammatory painkillers may stop the fracture healing properly, so it is better not to take these if possible.

What can I do to help make the operation a success?

If you smoke, stopping smoking may reduce your chances of getting complications and will improve your long-term health. Nicotine is known to stop fractures from healing.

Try to maintain a healthy weight. You have a higher chance of developing complications if you are overweight. Regular exercise should help you recover and improve your long-term health. Before you start exercising, ask a member of the healthcare team or your GP for advice.

You can reduce your risk of infection in a surgical wound.

• Try to have a bath or shower either the day before or on the day of your operation.

• Keep warm around the time of your operation. Let a member of the healthcare team know if you are cold.

What complications can happen?

The healthcare team will try to make your operation as safe as possible. However, complications can happen. Some of these can be serious. You should ask your doctor if there is anything you do not understand. Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

1 Complications of anaesthesia

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

2 General complications of any operation

• **Pain**, which happens with every operation. The healthcare team will try to reduce your pain. They will give you medication to control the pain and it is important that you take it as you are told so you can move about as advised.

• **Bleeding** during or after surgery.

• Infection of the surgical site (wound). It is usually safe to shower after 48 hours. However, you should check with a member of the healthcare team, and keep the wound dry and covered. If you have a plaster cast, you must keep it dry. Let the healthcare team know if you get a temperature, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics but you may need an operation.

• **Unsightly scarring** of the skin.



• **Difficulty passing urine**. You may need a catheter (tube) in your bladder for a day or two.

3 Specific complications of this operation

• **Damage to nerves** leading to a patch of numbness or a tender scar (risk: 1 in 10). The usually settles on its own but may be permanent.

• **Infection around a wire** (risk: 1 in 7). This usually settles when the wire is removed. You may need a course of antibiotics.

• The bones move out of position. If this happens, you may need an operation to fix the bones in a good position again.

• Severe pain, stiffness and loss of use of the wrist and hand (complex regional pain syndrome) (risk: 1 in 10). The cause is not known. If this happens, you may need further treatment including painkillers and physiotherapy. It can take months or years to get better. You may be able to reduce this risk by taking a 500mg vitamin C tablet each day for six weeks after your operation.

• **A 'dropped thumb'**, where one of the tendons that straighten the thumb snaps a few weeks after the operation (risk: 1 in 250). The reason for this is not known. If it happens, you will need an operation to redirect another tendon so you can move your thumb.

• **Carpal tunnel syndrome**, where there is increased pressure on the nerve that crosses the front of your wrist (the median nerve). This results in pain or numbness in your thumb, index and middle fingers. You may need a carpal tunnel release operation to relieve the pressure.

How soon will I recover?

In hospital

After the operation you will be transferred to the recovery area and then to the ward.

For the first four to five days after the operation, keep the wound dry and use a waterproof dressing when having a bath or shower. The healthcare team will tell you if you need to have any stitches removed or dressings changed. You should be able to go home after one or two days. However, your doctor may recommend that you stay a little longer.

If you are worried about anything, in hospital or at home, contact a member of the healthcare team. They should be able to reassure you or identify and treat any complications.

Returning to normal activities

The healthcare team will tell you when you can return to normal activities.

For the first week you will need to keep your hand raised to reduce swelling. It is important to move your fingers to help reduce any stiffness.

The fracture usually heals in about a month. If your surgeon used wires or an external fixator, they will usually remove these in the outpatient clinic. This procedure does not need another anaesthetic. You may need some physiotherapy if your wrist is stiff.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, you should ask a member of the healthcare team or your GP for advice.

Do not drive until you are confident about controlling your vehicle and always check your insurance policy and with your doctor.

• The future

Most people make a good recovery and are able to return to normal activities. However, full recovery can take many months.

Your doctor may recommend tests or further treatment to reduce your risk of having another fracture.

• Looking into any cause for your fall, such as a dizzy spell or blackout.

• An exercise program to improve your balance and muscle strength.

• Medication to make your bones stronger if you have osteoporosis.

The injury can cause you to lose some wrist movement permanently and sometimes cause your grip to be weaker. About 1 in 25 people develops arthritis in the wrist but this does not often need any treatment.



Summary

For some types of wrist fracture, an operation is the best way to make sure the bones heal in a good position.

Surgery is usually safe and effective. However, complications can happen. You need to know about them to help you make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Keep this information leaflet. Use it to help you if you need to talk to a healthcare professional.

Acknowledgements

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