**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’.

How does a wrist fracture happen?

Most 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?
A variety of anaesthetic techniques are possible. Your anaesthetist will discuss the options with you and will recommend the best form of anaesthesia for you. 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 special frame and pins).

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

• Lifestyle changes
If you smoke, try to stop smoking now. Stopping smoking several weeks or more before an operation may reduce your chances of getting complications and will improve your long-term health. Nicotine is known to stop fractures from healing. For help and advice on stopping smoking, go to www.gosmokefree.co.uk.

You have a higher chance of developing complications if you are overweight. For advice on maintaining a healthy weight, go to www.eatwell.gov.uk.

• Exercise
Regular exercise can reduce the risk of heart disease and other medical conditions, improve how your lungs work, boost your immune system, help you to control your weight and improve your mood. Exercise should help to prepare you for the operation, help with your recovery and improve your long-term health. For information on how exercise can help you, go to www.eidoactive.co.uk.

Before you start exercising, you should ask a member of the healthcare team or your GP for advice.

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.

The complications fall into three categories.
1 Complications of anaesthesia
2 General complications of any operation
3 Specific complications of this operation

What should I do about my medication?
You should continue your normal medication unless you are told otherwise. Let your surgeon know if you are on warfarin or clopidogrel. Follow your surgeon’s advice about stopping this medication before the operation. Anti-inflammatory painkillers may stop the fracture healing properly, so it is better not to take these if possible.
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 in the surgical wound. This usually settles with antibiotics but may occasionally need another 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 around the wrist, causing numbness in the hand or tenderness in the scar (risk: 1 in 10). The nerves usually get better over time.
• 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 another operation to fix the bones in the correct 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.
• 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.

How soon will I recover?
• In hospital
After the operation you will be transferred to the recovery area and then to the ward. 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, ask a member of the healthcare team. They should be able to reassure you or identify and treat any complications.

• Returning to normal activities
Your surgeon, physiotherapist and occupational therapist will tell you when you can return to normal activities. For the first week you will need to keep your hand raised up 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. The 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 with your doctor and insurance company first.

• The future
Most people make a good recovery and are able to return to normal activities. However, full recovery can take many months. 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 the correct position. Surgery is usually safe and effective. However, complications can happen. You need to know about them to help you to make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Further information
- NHS smoking helpline on 0800 169 0 169 and at www.gosmokefree.co.uk
- www.eatwell.gov.uk – for advice on maintaining a healthy weight
- www.eidoactive.co.uk – for information on how exercise can help you
- www.aboutmyhealth.org – for support and information you can trust
- American Academy of Orthopaedic Surgeons at www.aaos.org
- Reflex Sympathetic Dystrophy and Complex Regional Pain Syndrome UK at www.rsd-crps.co.uk
- www.wristfracture.co.uk
- NHS Direct on 0845 46 47 (0845 606 46 47 - textphone)
- www.eidohealthcare.com

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