

# Abdominal aortic aneurysm

Surgical options (open surgery)



**The information contained in this leaflet is of general interest only; some of the guidelines may not apply in your individual case.**

## **What is an aneurysm?**

The wall of an artery becomes thin due to the loss of elastic tissue, and the artery then swells. An aneurysm occurs when this weakened artery stretches and swells or balloons out, making it likely to leak. The most common artery to be affected is the aorta, which is the main artery in the abdomen.

## **How is an abdominal aortic aneurysm detected?**

Some patients have the aneurysm diagnosed when they are examined for another problem, or if they have a scan for a different reason; kidney trouble, or gallstones, for example. Occasionally, the patient may become aware of a feeling of pulsation in the abdomen. As the aneurysm stretches it can also cause pain in the back or abdomen.

If an aneurysm is suspected, your GP will refer you to a Specialist Vascular Surgeon for advice; either your GP or specialist will order an ultrasound scan. Ultrasound scanning of the abdomen is a painless outpatient test that only takes a few minutes to do. It is used to decide whether an aneurysm is present and to measure its exact size.

## **Who is at risk?**

It is known that the following are at risk:

- anybody over the age of 60
- younger men with a brother or father who has had an aneurysm
- people with other arterial disease including angina, hardening of the arteries or high blood pressure.

## **Do I need surgery?**

Not all aneurysms need an operation. The risk of a leak and therefore the need for repair, depends on the size of the aneurysm. If the aneurysm is large, it is sometimes safer to have an operation to repair it than to leave it alone. This protects the aorta from leaking in the future.

Smaller aneurysms are usually observed by repeat scanning at 6 to 12 monthly intervals, in case they enlarge and become dangerous.

Your Specialist Vascular Surgeon will give you a clear explanation of the options available for you.

If you need an **abdominal aortic aneurysm repair...**

## **Before coming into hospital**

Before your operation you will have tests carried out as an outpatient which may include scans of your abdomen or X-rays of the arteries, an arteriogram. Special scans of your heart to check that it is working properly may also be needed.

## **Coming into hospital**

You will usually be admitted to hospital one or two days before your operation in order for us to ensure you are fit for surgery. If you are taking any medication, please bring it with you because your doctor will need to see it.

When you arrive on the ward:

- a nurse will check your personal details and prepare you for your operation
- you will undergo a number of investigations, if these have not been performed previously, including a heart tracing, a chest X-ray and blood tests
- you will be seen by a surgeon who will be present at your operation
- a physiotherapist will visit you. She or he will help you with your breathing to prevent you developing a chest infection after your operation
- the doctor who will give you your anaesthetic (anaesthetist) will also visit you.

Many people are concerned about anaesthetics, so please ask the anaesthetist if you have specific worries so that he or she may reassure you.

All of these people are ready to answer any questions you may have, so please ask.

## **What does surgery involve?**

Current surgical treatment involves the insertion of a new lining into the aorta made of a very strong plastic material called Dacron – this will last up to 20 years or more.

The operation is done through an incision in the abdomen. There is now a new method in which this new lining is inserted through a smaller incision in the groin, passing it up into the aortic aneurysm from the normal artery below. Not every patient's aneurysm is suitable for this new keyhole technique, called EVAR (Endovascular Aortic Aneurysm Repair). If you are suitable for this technique your surgeon will discuss it with you and provide you with further information about the surgery.

## **Is surgery successful?**

If aneurysms are repaired before they leak, there is a high overall chance of successful repair and a return to normal life expectancy. However, you should discuss the risks of surgery in your particular case with your surgeon.

## **The operation**

Initially, we will take you on your bed to the anaesthetic room where you will be given your anaesthetic. As well as being put to sleep, you may also have a small tube placed in your back to help us give you pain relief following surgery, an epidural.

Whilst you are asleep tubes will also be inserted into:

- your bladder to drain your urine
- an artery at your wrist for blood pressure measurements
- a vein in your neck for the administration of fluid following surgery.

You will have a cut, down or across your abdomen and occasionally it's necessary to make a smaller cut in one or both groins. The wounds are often closed with a stitch under the skin that dissolves by itself, or by clips that will need to be removed.

## **After your operation**

You will usually be taken to the Intensive Care or High Dependency Unit following your operation in order for us to monitor your progress closely. It's sometimes necessary for you to remain on a breathing machine for a period after the operation but we will take you off this as soon as possible.

Following this sort of surgery the bowel stops working for a while. We will give you all the fluids you need using a drip, until your bowel is able to cope with you taking fluids by mouth. You may also need a blood transfusion.

The nurses and doctors will try to keep you free of pain by giving you pain killers by:

- injection
- the tube in your back (epidural)
- a machine that you are able to control yourself by pressing a button.

The anaesthetist will discuss pain relief with you before and after surgery.

As the days pass and you improve, we will remove the various tubes and you will go back to the ward until you are fit enough to go home.

You will be visited by the physiotherapist, who will remind you about your breathing and help you with your walking.

## **What about my stitches?**

If we use dissolvable stitches, these do not need to be removed. If your stitches or clips are the type that need removing, and this is not done whilst you are still in hospital, the practice or district nurse will remove them and check your wound.

## **What about when I go home?**

You will feel tired for many weeks after the operation but this should gradually improve as time goes by. For the first few weeks following your surgery, we recommend you take regular exercise such as a short walk combined with rest, followed by a gradual return to your normal activity.

- **Driving**  
You will be safe to drive when you are able to perform an emergency stop. This will normally be at least 4 weeks after surgery, but if in doubt check with your general practitioner.
- **Bathing**  
Once your wound is dry you may have a bath or shower as normal.
- **Work**  
You should be able to return to work within 1 to 3 months following your operation. If in doubt, please ask your general practitioner.
- **Lifting**  
You should avoid any heavy lifting or straining for at least 6 weeks after your operation.
- **Medication**  
We will usually send you home on a small dose of aspirin – this is to make your blood less sticky. If you are unable to tolerate aspirin, an alternative drug may be prescribed. Apart from this you will not need any other new medicines after the operation.
- **Outpatients**  
We will give you an appointment to attend the outpatient clinic after your operation; this is usually 6 to 8 weeks after you leave hospital.

## **Are there any risks or complications?**

**Around 95% of operations for aneurysm are successful, although the success rate is much lower when the operation is performed as an emergency for a leaking aneurysm.**

However, you need to know that:

- as with any major operation such as this there is a small risk of you having a heart attack or not surviving the surgery. This however, happens in less than 5% of patients. The doctors and nurses will try to prevent these complications and deal with them rapidly if they occur

- complications such as a chest infection can occur in up to 10% of patients following this type of surgery, particularly in smokers, and may require treatment with antibiotics and physiotherapy
- you may have discomfort and twinges of pain in your abdomen for several weeks after surgery
- wounds sometimes become infected; this can usually be successfully treated with antibiotics.

Rare but important complications include:

- kidney failure following the operation; this is more common after emergency operations for leaking aneurysms
- a small risk of losing a leg, or part of a leg, due to blood clots from the aneurysm blocking arteries lower down the legs
- sexual activity in men may be affected due to nerves in the abdomen being damaged during the operation. This can result in impotence in 10 – 20% of patients.

Occasionally, the bowel is slow to start working again; this requires patience and we will give you fluids through a drip until your bowels get back to normal.

## **Notes**

Please use this space to jot down any further questions or notes you may have after reading this booklet.

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

