

# Abdominal aortic aneurysm

 **Information for patients**  
Sheffield Vascular Institute



**PROUD TO MAKE A DIFFERENCE**

SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST





You have been diagnosed as having an abdominal aortic aneurysm. This leaflet explains more about abdominal aortic aneurysms and answers some of the most frequently asked questions. If, after reading it, you have any more questions or concerns, you should write them down and discuss them at your next appointment.

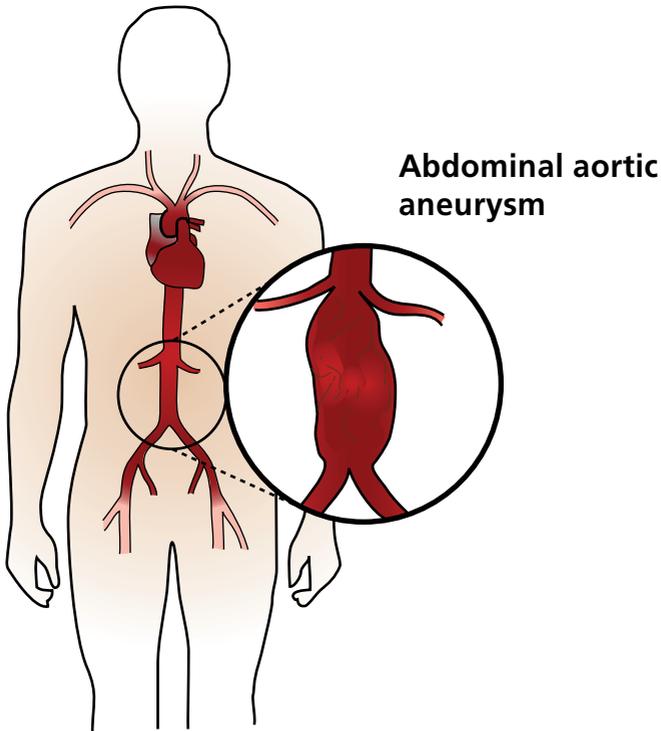
## Where will my hospital appointments take place?

Your appointments will usually be at the Sheffield Vascular Institute at the **Northern General Hospital**. We also run local outpatient clinics at the Royal Hallamshire Hospital, Rotherham and Barnsley District General.

Sheffield Vascular institute is a large vascular centre specialising in the treatment of circulatory conditions affecting the arteries, veins and lymphatics. If you wish to find out more about the Sheffield Vascular Institute then look under the Guide to Services of the Sheffield Teaching Hospitals NHS Foundation Trust website ( [www.sth.nhs.uk](http://www.sth.nhs.uk) )

## What is an aneurysm?

An aneurysm occurs when a weakened artery balloons out, rather like a worn car tyre. Most aneurysms grow very slowly over many years but eventually the wall of the artery can become so weakened that it ruptures. The most common artery to be affected in this way is the aorta, which is the main artery in your abdomen (tummy).



## How is an abdominal aortic aneurysm detected?

Some patients have their aneurysm diagnosed on a screening programme, some coincidentally when they are examined, or if they have a scan for another problem (for example prostate trouble or gallstones). Some become aware of a feeling of pulsation in their abdomen, and as the aneurysm stretches, it can also cause abdomen, groin or back pain.

## How common is it for an aortic aneurysm to rupture?

In England and Wales, between 6,000 and 10,000 people each year suffer from rupture of an abdominal aortic aneurysm. Rupture is often fatal, due to loss of blood, but about 1 in 5 people (20%) that receive emergency surgery have a successful repair.

## Why have I got this?

Men over the age of 65, younger men with a brother or father who has had an aneurysm, or men with other arterial disease are known to be at particular risk. However aneurysms can occur in men and women with no obvious cause. Smoking and high blood pressure are also known to increase the risk.

The NHS Abdominal Aortic Aneurysm Screening Programme has been introduced across the UK. The aim of this programme is to detect patients who have an aneurysm and, through early detection, reduce deaths due to rupture of the aneurysm. Screening is only offered to men, as aneurysms are less common in women and screening has not been shown to be of benefit to them.

## How will I know if my aneurysm is getting worse?

Small aneurysms are usually observed by regular ultrasound scanning at 6 to 12 monthly intervals. The average enlargement is about 0.5cm per year, but some aneurysms stay the same size for many years. Once an aneurysm becomes big enough to consider repair, we would send you for a computerised tomography (CT) scan to find out more information about its size and shape. We will also send you for other tests to assess your fitness in case surgery is required to treat your aneurysm.

## **Do I need treatment?**

Not all aneurysms need treatment. The risk of rupture, and therefore the need for repair, depends on the size of your aneurysm. The average risk of a small aneurysm rupturing is 1 in 100 (1%) per year. However, if a small aneurysm is operated on, about 1 in 20 (5%) patients will not survive either the operation or the next 30 days. As the aneurysm gets bigger the risk of rupture increases, but the risks of treatment remain the same.

## **When would an aneurysm need to be treated?**

We would consider treatment when and if an aneurysm becomes larger than 5.5cm in diameter. At this point, it is probably safer to repair it than to leave it alone.

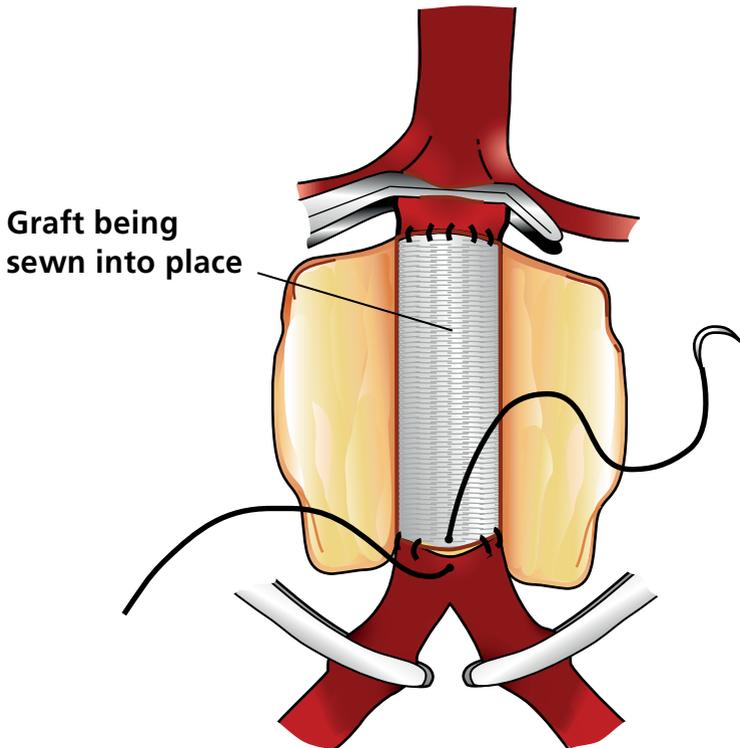
Other factors will also determine when we would consider repair surgery. These include:

- The presence of symptoms
- Other medical problems
- Your overall fitness

## What does treatment involve?

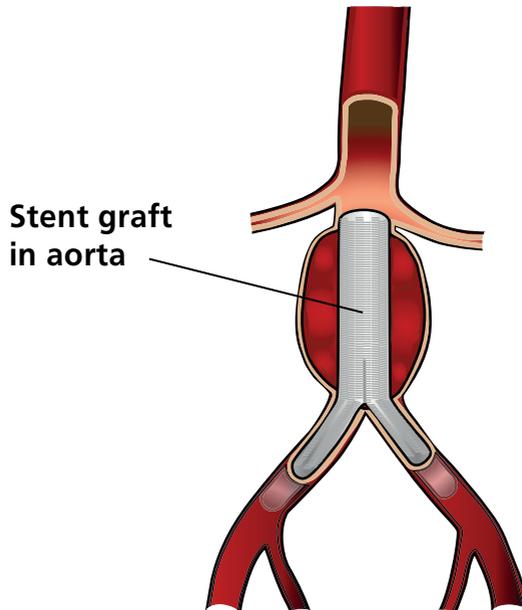
If you do need treatment, there are two methods available: **open repair** and **endovascular repair**. Both have advantages and disadvantages.

**Open surgical repair** involves sewing in a new plastic tube (graft) to replace the weakened section of the aorta. The operation is done through an incision in the abdomen. It is carried out in the operating theatre under a general anaesthetic. This is a big operation and 1 in 20 patients (5%) do not survive. The actual risk varies from patient to patient and largely depends upon the presence of other medical problems. You will need to stay in hospital for 7 to 10 days, and then about 6 weeks recovery at home. This operation has been done for many years and is known to be very reliable.



**Endovascular repair** is a newer method. It involves inserting a new lining (stent-graft) into the aorta through small incisions in the groin. This is carried out in the radiology department and can usually be done using spinal anaesthesia. It only requires a few days in hospital and recovery is much quicker, but 1 in 50 patients (2%) do not survive.

Endovascular repair does not provide as good long-term protection as an open repair from subsequent leaks (about 1 in 20 per year (5%)). This means that regular scans will be required to detect any leaks. Most leaks can be dealt with by further treatment in the radiology department but very occasionally conversion to an open repair becomes necessary. Not all aneurysms are suitable for endovascular repair.



The choice of treatment method will depend upon the shape of your aneurysm, your overall fitness for treatment, other medical problems, and your preference. Your vascular specialist will advise you on the best treatment for your specific circumstances.

## What if I decide not to have an operation or I am not fit for an operation?

Occasionally some patients who have an aneurysm that requires repair decide that they do not wish to have an operation performed. Other patients may not be fit enough to have the aneurysm repaired, or the aneurysm is too complicated to repair safely. These are decisions that will be discussed between you and your specialist. Some patients survive for many years with a large aneurysm without any trouble. **We have no accurate way of predicting when an aneurysm is likely to rupture, although unusual back or abdominal pain is sometimes a sign that the aneurysm is getting bigger.**

You should continue with your daily routines and having the aneurysm should not stop you from doing anything. You are still able to fly and altitude has not been shown to increase the chance of rupture of the aneurysm. However, you must tell your holiday insurance company if you have an aneurysm.

**If you drive a car, the DVLA need to be informed when the aneurysm reaches 6cm. You must stop driving when it reaches 6.5cm.**

**If you hold a bus, coach or lorry licence you need to tell the DVLA if you have an aortic aneurysm of any size.**

**<https://www.gov.uk/aneurysm-and-driving>**

## How can I help myself?

There is nothing you can do about your aneurysm. However, you can help to improve your general health by taking regular exercise, losing weight and stopping smoking. Such improvements to lifestyle are particularly important if you are going to have surgery to repair your aneurysm.

**Smoking:** If you smoke, the most important thing that you can do for yourself is give up smoking. Stopping smoking will also protect all of your arteries, making it less likely that you will suffer from heart attacks or strokes. Giving up is not easy but there are smoking cessation services and support groups that can help. Your specialist, GP or practice nurse can advise you about these.

**Inactivity:** Gentle exercise such as walking and cycling are recommended to help improve your overall fitness.

**High blood pressure:** High blood pressure is known as a risk factor for aneurysm rupture. It is very important that you have your blood pressure checked regularly, at least every six months. If you need medication for high blood pressure it is very important that you take it as instructed.

**Diabetes:** It is important if you have diabetes that it is well controlled. Having regular blood sugar checks and taking your medication is very important.

**High blood cholesterol levels:** You should try to eat a healthy balanced diet and try to reduce any excess weight. It is important to reduce the level of cholesterol in your blood. You may need to be referred to a dietitian, but your specialist can advise you on this.

## Do I need to take any medication?

When you have been diagnosed with an aneurysm it is recommended that your medication includes an anti-platelet tablet, such as aspirin, and cholesterol tablet, such as a statin. If you do not already take these then your specialist may ask your General Practitioner to prescribe these for you.

## How can I tell if I need urgent medical attention?

If you experience sudden onset of new severe abdominal pain or back pain that is distinct from any other back pain you have had previously, you may be developing a leak from your aneurysm.

If you experience any of these things please **dial 999** and tell the ambulance control that you have an aortic aneurysm and you need to go urgently to hospital.

**Do not drive yourself to hospital.**

## Contact numbers

Vascular Nurse Specialist:

- **0114 226 9311** or **271 4688**

Firth 2 (Vascular Ward):

- **0114 271 4602** or **271 4685**

Sheffield Stop Smoking Service:

- **0800 068 4490**

NHS Abdominal Aortic Aneurysm Screening Programme:

**[www.aaa.screening.nhs.uk](http://www.aaa.screening.nhs.uk)**

Circulation Foundation

**[www.circulationfoundation.org.uk](http://www.circulationfoundation.org.uk)**



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