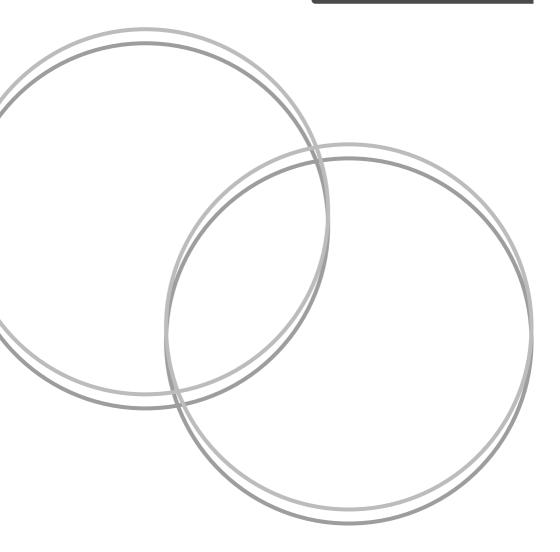


# Abdominal Aortic Aneurysms

Information for you, your family and carers



This leaflet has been written to tell you about **small abdominal aortic aneurysms**.

## What is the aorta?

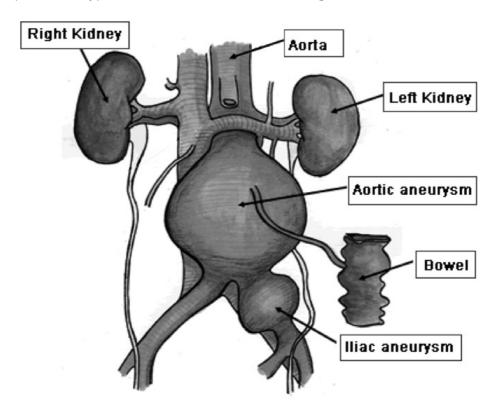
The aorta is the largest artery (blood vessel) in the body. It carries blood from the heart and descends through the chest and the abdomen. Many arteries come off the aorta to supply blood to all parts of the body. At about the level of the pelvis the aorta divides into two iliac arteries, one going to each leg.

# What is an aneurysm and an abdominal aortic aneurysm?

An aneurysm occurs when the wall of a blood vessel is weakened and balloons out. In the aorta, this ballooning makes the wall weaker and more likely to burst. Aneurysms can occur in any artery, but they most commonly occur in the section of the aorta that passes through the abdomen. These are known as **abdominal aortic aneurysms (AAA)**.

# What causes an AAA?

The exact reason why an aneurysm forms in the aorta is not often clear. Aneurysms can affect both men and women of any age. However, they are most common in men, people with high blood pressure (hypertension) and those over the age of 65.



The wall of the aorta normally has layers of supporting tissues. As people age, they may lose some of this tissue. This is thought to be the reason why aneurysms are more common in older people.

Your genetic make-up can also be a reason as you have a much higher chance of developing an aneurysm if one of your immediate relatives (parent, brother or sister) has or has had one before. Certain other 'risk factors' increase the chance of getting an aneurysm. These include:

- smoking
- high blood pressure
- high cholesterol
- lung damage, such as emphysema (chronic obstructive pulmonary disease)
- obesity (being overweight).

# How are aneurysms discovered?

The majority of aneurysms cause no symptoms and are discovered by chance. A routine examination by a doctor, or an X-ray or scan performed for some other reason may pick up the presence of an aneurysm. Some patient's notice an abnormal pulsation in their abdomen. As the aneurysm stretches it can also cause pain in your back or abdomen.

Regular screening for abdominal aortic aneurysms has been introduced for all men over the age of 65 across the country. This is performed using an ultrasound scan. An ultrasound uses sound waves to create images of your internal organs on a screen. The scan will tell you if there is an aneurysm present and exactly how large it is.

Sometimes the hospital will carry out a more detailed CT scan (computerised tomography scan). This may be done if your doctor needs to know whether the aneurysm is affecting any of the arteries that come off of the aorta.

If your doctor thinks you may have an aortic aneurysm after examining you, or has confirmed an aneurysm on an ultrasound, they will refer you to a Vascular Surgeon for advice.

# What are the symptoms of an Abdominal Aortic Aneurysm?

Aneurysms generally take years to develop and it is rare for them to give symptoms during this time.

If you do develop symptoms, you may experience one or more of the following:

- a pulsing feeling in your abdomen, similar to a heartbeat
- pain in your abdomen or lower back.

# Do I need an operation to treat my abdominal aortic aneurysm?

Not if your aneurysm is small. Research has shown that for people with aneurysms measuring less than 5.5cm (about 2 inches), it is safer not to operate, as the risks of having an operation are greater than the benefit

Most small aneurysms will not need treatment when they are discovered, but will need to be watched with regular ultrasound scans. If the aneurysm gets larger then you may need to have the aneurysm repaired.

There are two types of operations available depending on your anatomy and overall health. These are an open abdominal aortic aneurysm repair or an endovascular aneurysm repair (EVAR), more information can be found in separate information leaflets.

How often you will need to have a scan will depend on the size of your aneurysm. If your aneurysm is small it is likely that you will only need a scan once a year.

The results of the scan will be explained to you and you will be told the size of your aneurysm. If this is your first appointment we may need you to come to a further appointment at the hospital clinic to be examined. If you have any worries or concerns about your aneurysm you can discuss them with your Vascular Surgeon or Vascular Specialist Nurse (VSN). If your aneurysm starts to produce symptoms, or rapidly increases in size (as measured by the scan), you will be seen by your Vascular Surgeon. You may then need an operation to repair the artery.

The Vascular Specialist Nurse can help in a variety of ways, such as discussing what an aortic aneurysm is, how it will affect you and how to stay fit and well with an aneurysm. The Vascular Specialist Nurse can also recommend the best medical treatment and provide information about surgical options.

### When you meet with the Vascular Specialist Nurse they will:

- Take your height, weight and blood pressure.
- Discuss your medical history.
- Discuss medications that can help.
- Recommend the best medical treatment to you and your GP.
- Give you advice about keeping healthy.
- Give advice about giving up smoking, If necessary.

# Why do I need to have my aneurysm checked regularly?

The larger your aneurysm becomes, the more chance there is of it causing serious problems. Most abdominal aortic aneurysms occur at the lower end of the aorta. In this position they can get bigger without causing any symptoms. Most aneurysms grow slowly at a rate of about 3mm (1/8th inch) per year. However, larger aneurysms are more likely to grow quickly, so scans will be carried out more frequently as the aneurysm enlarges. If an aneurysm gets too large there is an increased risk that it may leak or rupture (burst) without any warning.

# What is the chance of a small abdominal aortic aneurysm rupturing?

The chance of rupture is very low for small aneurysms. For aneurysms measuring less than 5.5cm in diameter the risk of rupture is less than 1 in 100 per year. If an aneurysm becomes larger than 5.5cm, the risk of rupture increases and it is usually at this size that the option of surgery is considered.

At any size, rupture risk is increased in smokers, those with uncontrolled blood pressure, people with chronic chest conditions such as COPD, women and those with a family history of an abdominal aortic aneurysms.

Every person's risk from their aneurysms and from surgery may be different. Any decision on treatment will be carefully considered by your Vascular Team and always discussed in detail with you and, when appropriate, your family.

Intervention may be considered for a smaller size aneurysm if you are female or have a connective tissue disorder such as Marfan's syndrome.

# Do I need to take things easy?

There is no need to limit your everyday activity now that you have been told you have an aneurysm. Moving around, lifting and exercise will not affect your aneurysm or cause damage. Exercise is important to improve your health and make you fitter and stronger for an operation, if you need one.

# **Driving with an abdominal aortic aneurysm**

Drivers of lorries and buses must tell the Driver and Vehicle Licensing Agency (DVLA) if you have an aortic aneurysm of any size. You will be suspended from driving once an aortic aneurysm reaches 5.5cm.

If you have a small aneurysm (less than 5.5cm) you can continue to drive a car and do not need to inform the DVLA. The DVLA only requires written notification for car drivers once an aortic aneurysm reaches 6cm. The DVLA only suspends drivers of cars with aortic aneurysms of 6.5cm or greater. You can be fined up to £1,000 if you don't tell DVLA about a medical condition that affects your driving. You may be prosecuted if you are involved in an accident as a result. You can reapply for your licence if your aneurysm is successfully treated.

You must inform the DVLA: www.gov.uk/aneurysm-and-driving

# What are the implications for air travel and travel insurance?

Aortic aneurysms are no more likely to rupture when flying. We are not aware of any airlines operating a standing rule refusing patients with this condition. We are also unaware of any travel insurance policies that contain a specific exclusion for aortic aneurysms as part of their standard wording. However, some companies have been known to query or decline cover insurance once notified of the finding of an aneurysm. The association of British insurers (ABI) suggests that you should declare that you have an aneurysm during a travel insurance application process, or when the aneurysm has been diagnosed and you have an existing travel policy. You will not be asked the size of the aneurysm but will be asked about planned treatment.

# What do I do if I get new symptoms?

If you experience sudden onset of new severe abdominal pain that is distinct from any back pain you may have had previously, you may be developing a leek from your aneurysm or an immediate risk of rupture. If you experience any of these symptoms, please dial 999 for an ambulance and tell the ambulance control that you have an aortic aneurysm and need to go urgently to hospital.

Do NOT drive yourself to hospital.

# What can I do to help myself?

Make sure you attend your regular check-ups, as this is where you will have the tests to check the size and growth of the aneurysm.

You may be able to make changes/monitor your symptoms at home, with support from your GP, to help prevent or control conditions that may lead to an increase in the size of your aortic aneurysm, such as atherosclerosis (a build-up of fatty deposits within the arteries) or high blood pressure.

## **Giving up smoking**

Smoking is a major risk factor for aneurysms because it causes altherosclerosis and raises your blood pressure. There are also harmful substances in tobacco smoke that could damage the walls of your arteries.

Smokers are seven times more likely than non-smokers to develop an aortic aneurysm.

If you smoke, the most important change you can make is to stop smoking, people who smoke usually have faster-growing aneurysms than non-smokers.

### **Controlling your blood pressure**

Take regular exercise. Visit your doctor who will be able to tell you whether you need medication to help control your blood pressure.

Salt raises your blood pressure. The more salt you eat, the higher your blood pressure will be, aim to eat less than 6g (0.2oz) of salt a day – about a teaspoonful.

Eating a low-fat diet that includes lots of fibre (such as wholegrain rice, bread and pasta) and plenty of fruit and vegetables has been proven to help lower blood pressure. Fruit and vegetables are full of vitamins, minerals and fibre to keep your body in good condition. Aim to eat five portions of fruit and vegetables every day.

### **Controlling high cholesterol**

Eat a healthy diet, low in saturated fats and cholesterol, and take regular exercise. Make sure you visit your doctor to have your cholesterol levels checked, they may decide to start you on a cholesterol lowering tablet called statin.

#### Managing your weight

Losing weight is not likely to change the course of an aortic aneurysm, but it may lower the risk of complications if you eventually need surgery.

Being overweight forces your heart to work harder to pump blood around your body, which can raise your blood pressure

If you need to lose weight, it is worth remembering that losing just a few pounds will make a big difference to your blood pressure and overall health. If you would like help to lose weight, please speak to your Vascular Nurse Specialist.

# **Contact numbers**

If you have any queries or further questions about your aneurysm and how it might affect you, please contact the Vascular Nurse Practitioner.

Telephone: 01865 572 626 via switchboard 0300 304 777

You can also contact the Vascular Surgeons through

their Secretaries:

Telephone: 01865 221 102

# **Useful information**

#### **NHS Website**

Website: www.nhs.uk

#### **Vascular Society of Great Britain and Ireland**

Telephone: **0207 869 6936** 

Email: office@vascularsociety.org.uk
Website: www.vascularsociety.org.uk

#### **The Circulation Foundation**

Telephone: 0207 869 6938

Email: <u>info@circulationfoundation.org.uk</u>
Website: <u>www.circulationfoundation.org.uk</u>

A charity which has a number of patient information leaflets to help explain vascular illness and its treatment. It also funds research into the prevention and causes of vascular disease.

### **NHS** screening programs

Website: <u>www.gov.uk/topic/population-screening-programmes</u>

Public Health website with details of the AAA screening programs in the various countries of the UK.

### For help giving up smoking

#### **NHS Smokefree**

Smokefree Helpline: 0300 123 1044

Website: www.nhs.uk/better-health/quit-smoking/

#### References

- 1. The UK Small Aneurysm Study Participants. 2 Mortality results for the randomized controlled trial of early elective surgery or ultrasonographic surveillance for small abdominal aortic aneurysms. "Lancet 1998; 352:1649-55.
- 2. DOH Smoking kills. A white paper on tobacco. The Stationery Office, London, December 1998.

### **Further information**

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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Oxford University Hospitals NHS Foundation Trust

www.ouh.nhs.uk/information



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