

Small Abdominal Aortic Aneurysms – AAA Information for Patients and Carers

This leaflet tells 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 in most cases is not clear.

Aneurysms can affect people of any age and both sexes. 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 explain why aneurysms are more common in older people.

Your genetic make-up plays a part as you have a much higher chance of developing an AAA if one of your immediate relatives (parent, brother or sister) has or had one.

Certain other 'risk factors' increase the chance of getting an aneurysm. These include: smoking, high blood pressure, high cholesterol, emphysema and obesity.

How are aneurysms discovered?

The majority of AAAs 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. Alternatively, some patients notice an abnormal pulsation in their abdomen. As the aneurysm stretches it can also cause pain in your back or abdomen.

In some parts of the country, screening for AAAs has been introduced. This is performed using an ultrasound scan. The scan will tell you if there is an aneurysm present and exactly how large it is.

A more detailed CT scan is sometimes done. This may be done if your doctor needs to know whether the aneurysm is affecting any of the arteries that come off the aorta. CT scans are also done by surgeons to help plan an operation.

If an aneurysm is suspected on clinical examination, or found on ultrasound, your GP will refer you to a Vascular Surgeon for advice.

What are the symptoms of an AAA?

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 aneurysm?

Not if your aneurysm is small. Research has shown that for people with aneurysms, measuring less than 5.5cms (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 in the beginning, but need to be watched with regular scans. If they enlarge then you may need to have the aneurysm repaired. The scan test is done with ultrasound to measure the size of your aneurysm. This is a quick and painless test and is similar to the scans done on pregnant women to show a picture of their baby. How often you will need to have a scan will depend on the size of your aneurysm. If your AAA is small and it is unlikely that you will need a scan more than twice a year.

You will be told about the results of your scan by letter. Occasionally you may be asked to attend 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 specialist nurse.

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 as you may then need an operation to repair it. If your surgeon recommends an operation you will be given more information.

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 in 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 are done more frequently as the AAA enlarges. If an AAA gets bigger there is an increased risk that it may leak or rupture (burst) without any warning.

Aneurysm Surveillance

The purpose of Aneurysm Surveillance is to monitor the size and any changes in the aneurysm. You will have an ultrasound scan which is a quick and painless test to measure the aneurysm. The frequency of these scans will depend on the size of the aneurysm.

We will write to you once we have the result of your scan informing you if there are any changes in the size of your aneurysm and approximately when you will be having your next scan.

Your Consultant will also be informed and a letter sent to your GP with your result. Should your aneurysm become symptomatic or increase in size rapidly or reach the threshold whereby we feel intervention is necessary an appointment will be made for you to have further investigations and you may be invited to attend the outpatient clinic. Most aneurysms enlarge slowly, so you may never develop a large AAA that needs treatment.

When you reach 85 years old your Consultant will see you in clinic to discuss if surveillance is still required.

The risks of having an AAA increase if your brother, sister or parent has, or has had, an abdominal aortic aneurysm. You should therefore inform any brothers, sisters or children that your AAA means that they are also at risk.

They can ask their GP about the possibility of requesting a scan at an age five years earlier than the age at which your AAA was found.

You might wonder why you can't have an operation straight away. All operations have risk's, research shows that an operation to treat a medium sized aneurysm has a higher risk of health problems than monitoring the aneurysm and only operating if it enlarges to 5.5cm or wider.

What is the chance of a small AAA rupturing?

The chance of rupture is very low for small AAAs. For aneurysms measuring less than 5.5cm in diameter the risk of rupture is less than 1 in 100 per year. As aneurysms get larger than 5.5cm, the risk of rupture increases and it is usually at this size that the option of surgery is considered. For any given size, rupture risk is increased in smokers, those with high blood pressure, and those with a family history of an AAA.

Each individuals risk from their AAA and from surgery may be different so any decision on treatment will be carefully considered by your vascular team and always discussed in detail with you and, when appropriate, your family.

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 effect 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 AAA

If you have a small AAA (<5.5cm) you are allowed to continue to drive. The DVLA should be notified if your aneurysm reaches 6cm in diameter, but you are allowed to continue to drive if you have had satisfactory medical treatment and there is no further enlargement of your AAA. If your AAA reaches 6.5cm in diameter you are disqualified from driving.

HGV drivers are disqualified from driving if their AAA is 5.5cm in diameter, but can resume driving if the AAA is successfully treated.

What can I do to help myself?

Smoking. If you are a smoker the single most important thing you can do to help yourself is to give up smoking. Stopping smoking will also help to 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 is a smoking cessation service and support groups that can help.

Your vascular specialist nurse or GP practice nurse can advise you about these.

Inactivity. Gentle exercise such as walking and cycling are recommended to help to improve your overall level of fitness. Exercise helps your body to produce healthy cholesterol and this helps to protect your arteries against bad cholesterol.

High blood pressure. High blood pressure is a known risk factor for rupture of aneurysms. It is very important that you have your blood pressure checked regularly, at least every 6 months. If you have been prescribed medication for high blood pressure you must make sure that you take it according to the instructions given.

Diabetes. If you have diabetes it is important that your blood sugar levels are well controlled.

High blood cholesterol levels (fatty substance) in your blood. You should 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 will be given advice on how to do this. Your vascular nurse can refer you to a dietician if needed. You may be prescribed a statin drug to lower your cholesterol level and low-dose aspirin to help prevent blood clots from forming.

What do I do if I get new symptoms?

If you experience sudden onset of **new severe abdominal pain** or **back pain that is distinct from any back pain you may have had previously**, you may be developing a leak from your AAA or at immediate risk of rupture.

If you experience any of these things **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.

Points of contact:

Vascular Specialist Nurses

Norfolk & Norwich University Hospitals NHS Foundation Trust
Tel: 01603 287844 or 01603 647971 (Monday to Friday 9am-5pm)

Further information and support:

Mr W Al-Jundi	01603 287552
Mr M P Armon	01603 287552
Mr P C Bennett	01603 286263
Mr R E Brightwell	01603 287394
Mr M S Delbridge	01603 286434
Miss F J Meyer	01603 287136
Mr D R Morrow	01603 286442
Prof P W Stather	01603 647289

NHS 111 service out of hour's advice

Vascular Surgical Society of Great Britain and Ireland

Tel: 020 7205 7150

Web address: www.vascularsociety.org.uk

Circulation Foundation

Tel: 020 7205 7151

Web address: www.circulationfoundation.org.uk

For help giving up smoking

Contact your local NHS Stop Smoking Service Smoke free Norfolk on
0800 08 54113 or your GP surgery, pharmacy for local support.



The NHS National Stop Smoking Helpline and website are a source of
advice, help and support visit www.smokefree.nhs.uk.