

# Abdominal aortic aneurysm (AAA)

## Introduction

This leaflet tells you about abdominal aortic aneurysm; it explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor but can act as a starting point for such a discussion.

## What is an abdominal aortic aneurysm (AAA)?

The aorta is the largest blood vessel in the body. It carries blood from the heart to the chest and abdomen and then divides to supply the legs. A portion of the aorta can become weakened and form a bulge or aneurysm as it passes through the abdomen. Risk factors for developing an aneurysm include increasing age, family history, smoking and high blood pressure. Aneurysms may stay the same size or increase in size slowly. Small aneurysms can simply be monitored by ultrasound to assess growth. When they reach a certain size they have a sufficiently high risk of rupture that treatment should be considered. Treatment avoids rupture which has a very high risk of death due to internal bleeding.

## 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 and those over the age of 65 years.

The wall of the aorta has layers of tissue and 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 – you have a much higher chance of developing an AAA 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 and COPD
- Obesity ( being overweight)

## 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. Some people notice an abnormal pulsation in their abdomen.

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

### **What are the symptoms of AAA?**

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

If you develop symptoms you may experience a pulsing feeling in the abdomen, similar to a heartbeat.

### **Do I need an operation to treat my AAA?**

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 when they are discovered but will need to be watched via regular ultrasound scans. If the aneurysm gets larger then you may need to have the aneurysm repaired by surgery.

When we carry out the ultrasound screening we will measure the size of your aneurysm. This is a quick and painless test and is similar to the scans done on pregnant women. We use a handheld ultrasound probe over the skin on your abdomen to show the aneurysm. 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.

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

The larger the aneurysm becomes, the more chance there is of it causing serious problems. Most abdominal aortic aneurysms occur at the lower end of the aorta, below the level of the kidneys. Aneurysms can get bigger without causing any symptoms. Most aneurysms grow slowly (at a rate of 1-3mm a year) or can stay the same size. However, larger aneurysms can grow quickly, so scans will be carried out more frequently as the AAA enlarges. If an AAA gets too large there is an increased chance it may rupture or burst without warning.

### **What is the chance of a small AAA rupturing?**

The chance of rupture is very low for small AAAs. For aneurysms measuring less than 5.5cms in diameter the risk of rupture is less than 1 in 100 per year. As aneurysms get larger than 5.5cms 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 high blood pressure, and those with a family history of AAA.

Every person's risk from their AAA 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, with your family.

## **Will this change my lifestyle?**

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 AAA**

If you have a small AAA (smaller than 5.5cms) you are allowed to continue to drive. However, the DVLA should be notified if your aneurysm reaches 6cms in diameter.

**If you drive a heavy good vehicle or public service vehicle, you must report it to the DVLA.** Please go to their website at [www.gov.uk/aneurysm-and-driving](http://www.gov.uk/aneurysm-and-driving) for more information.

## **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 your GPs surgery should have a smoking cessation service available, and there are support groups that can help.

### **Keep moving**

Gentle exercise such as walking and cycling are recommended to help 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 increases the risk of your aneurysm rupturing. It is very important that you have your blood pressure checked regularly, at least every six months. If you have been prescribed medication for high blood pressure you must make sure that you take it according to the instructions you have been given.

### **Diabetes**

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

### **High blood cholesterol levels**

Cholesterol is a substance in your blood. Your body can produce its own 'healthy' cholesterol when you exercise, but your blood can also carry bad cholesterol from food. You should eat a healthy balanced diet and try to reduce any excess weight. It is important to reduce the amount of bad cholesterol in your blood. You may be prescribed a statin drug to lower your cholesterol level and a low dose of aspirin or a different anti-platelet if

you are unable to take aspirin, to stop the blood becoming sticky. This could happen as you get older.

### **What do I do if I get new symptoms?**

If you experience a sudden onset of new severe abdominal pain or back pain that is different from any back pain you may have had previously, this means you may be developing a leak from your AAA. If you experience any of these symptoms please dial 999 for an ambulance. Tell the operator that you have an aortic aneurysm and need to go to hospital urgently.

### **Useful numbers**

#### **Royal Berkshire Hospital**

Vascular Clinical Nurse Specialists, Tiina Winson and Nora Lengyel, 0118 322 8627.

Surgery Clinical Admin Team (CAT3), Royal Berkshire Hospital 0118 322 6890.

Smokefreelife Berkshire

0118 449 2026/0800 622 6360

### **Useful website addresses**

[www.smokefreelifeberkshire.com](http://www.smokefreelifeberkshire.com)

[www.vascularsociety.org.uk](http://www.vascularsociety.org.uk)

[www.bhf.org.uk](http://www.bhf.org.uk) – British Heart Foundation Website

[www.gov.uk/aneurysm-and-driving](http://www.gov.uk/aneurysm-and-driving)

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

RBFT Vascular Surgery, June 2022

Review due: June 2024