

Abdominal aortic aneurysm

Vascular Surgery Patient Information Leaflet

This leaflet tells you about a condition known as an abdominal aortic aneurysm; it explains what the condition is, how it is monitored and briefly describes the surgical treatment options. There are separate more detailed leaflets about the two surgical options available. This leaflet is not meant to replace the information discussed between you and the doctor, but can act as a starting point for such discussion or as a useful reminder of the key points.

What is an aneurysm?



An aneurysm occurs when the walls of your arteries weaken. The pressure of blood flow can cause it to stretch and balloon out to form an aneurysm, rather like a worn car tyre.

Aneurysms can occur in any artery. They can be small and round or long and balloon-like. The most common artery to be affected is the aorta, which is the main artery in your tummy (abdomen). These are known as abdominal aortic aneurysms (AAA).

The aorta is the largest blood vessel in your body. It runs from the left side of the heart, down through the chest and into the abdomen. At about hip level, it divides into two arteries which deliver blood to your legs and feet (iliac arteries).

Who is at risk?

It is known that men over the age of 60 or younger men with a brother or father who have had an aneurysm or men with arterial disease (angina or heart attack), hardening of the arteries, or high blood pressure are more at risk.

About four in 100 men over the age of 65 will develop an aneurysm, though not all will be of significant size, and about one in 100 will have a large aneurysm requiring surgery. Aneurysms are about six times rarer in women. Smoking and high blood pressure are known to increase the size and risk of aneurysms once they are present.

How is an aneurysm diagnosed?

Aneurysms generally take years to develop and it is rare for them to give symptoms during this time. This condition is often found by chance during a physical examination or scan for unrelated symptoms.

Occasionally, a patient may become aware of a feeling of pulsation in the abdomen. As an aortic aneurysm stretches, it can cause pain in the back of the abdomen but the pain is not common. If an aneurysm is suspected an ultrasound scan will be performed.

An ultrasound scan of the abdomen is a painless outpatient test that will only take 10-15 minutes to do. It is used to decide whether an

aneurysm is present and to measure the exact size. The most important feature of the scan is the maximum diameter of the aorta, which is usually about two and a half centimetres across in adults, although this varies with your build. An aneurysm is said to be present if the artery is over three centimetres across, and then the tendency is for the vessel to gradually increase over years.



What happens now?

Not all aneurysms need surgery. The size of the aneurysm will guide the surgeon on your management. Your surgeon will discuss whether you need an operation soon, or whether you should be placed onto a surveillance programme. If you are placed on the surveillance programme you will be called for scans on a regular basis to monitor the size of the aneurysm.

- If the aneurysm is three and a half centimetres or less you will be called for a scan every 18 months.
- If the aneurysm is between three and a half to four centimetres you will be called for a scan every 12 months.

- If the aneurysm is four to five centimetres you will be called for a scan every six months.
- If the aneurysm is five centimetres or greater you will be called for a scan every three months.

Your consultant will be informed each time you have a scan of the aneurysm size and any changes that may have occurred in its presentation.

Will I need an operation?

Surgery is only advised when it is considered that the risk of the aneurysm bursting is greater than the risk of having surgery. Eventually the aneurysm may reach a size where surgery is indicated, usually when they exceed five and a half centimetres. Because surgery carries significant risks, the decision to operate must take into account the individual health of the patient, in particular the heart, lungs and kidneys. Before operating, most patients will need some sort of tests on these organs.

Risks of aneurysm rupture

Size of aorta	Description	Risk of rupture/ year
4cm or less	not an aneurysm	no real risk
4 - 5cm	small aneurysm	about 1 in 100
5 - 6cm	AAA	about 1 in 12
6 - 7cm	large aneurysm	about 1 in 6
over 7cm	very large aneurysm	about 1 in 4 or higher

What operation will be performed?

Traditional surgery for aneurysm repair involves an incision in the abdomen and replacement of the affected section of vessel with a fabric tube. If the aneurysm extends into the pelvis, then a graft designed like a pair of trousers is used and may extend to the groins in some patients. The main risk of surgery is death or heart attack, and this is about one in 20 patients overall. However after a successful operation the risk of later complications is very low.

With modern technology, the risks of the operation can be markedly reduced by keyhole or endovascular surgery using a stent-graft, but not every patient or every aneurysm is suitable for this. In particular, aneurysms arising close to or above the kidneys are more difficult to treat in this way.

6

All patients treated by endovascular surgery need to be followed up postoperatively with regular scans to detect slippage or failures of the stent-graft. Ten per cent of patients will require further intervention in the future.

Is surgery successful?

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

The risks attached to the open repair through an incision in your abdomen are of you having medical complications such as heart attack, stroke, kidney failure, chest problems, and loss of circulation to the legs or bowel, deep vein thrombosis (blood clot in the leg vein) and infection of the artificial artery. Each of these is rare, but it does mean overall that some patients may have a fatal complication from their operation. For most the risk is about five per cent.

With the stent-graft the potential complications of traditional repair are greatly reduced as there is far less stress placed on the heart, less risk of haemorrhage (bleeding) or respiratory complications. The main complication associated with this type of aneurysm repair is the risk of the graft moving from the position resulting in a leakage of blood into the aneurysm. This means that the aneurysm has not been sealed and complete or part blockage of the graft by a blood clot. If this happens it may require an operation to reinstate the blood flow to the leg arteries.

What you can do to help yourself

You should consider what you can do to improve your general health. For example:

7

- Eat a healthy diet which includes keeping a low salt intake.
- If you are able, exercise regularly.
- Lose weight if you are overweight.
- Do not smoke.
- Drink alcohol in moderation.
- If you have high blood pressure, diabetes, or a high cholesterol level, they should be well controlled on treatment.
- You may be prescribed a statin drug to lower your cholesterol level and low-dose aspirin to help prevent blood clots from forming (information relating to this medication will be provided if it is dispensed).

Additional advice for patients who have an aneurysm

Drivers

Group 1 entitlement ODL – Car, Motorcycle. The DVLA should be notified of any aneurysm that reaches six centimetres or greater in diameter. Licensing will be permitted subject to annual review. Driving may be continued after a satisfactory medical (blood pressure control) or surgical treatment. An aortic aneurysm diameter of six and a half centimetres or greater disqualifies you from driving.

Group 2 Entitlement VOC – LGV/PCV. DVLA disqualifies you from driving if the aorta diameter is greater than five and a half centimetres. Driving may continue after satisfactory medical or surgical treatment. Reference www.dvla.gov.uk/at-a-glance/ch2-cardiovascular

Flying

If you have an aneurysm and are considering a holiday which involves flying, you will need to declare this condition to your travel insurance company. Some insurance companies will not provide cover for you as some airlines refuse patients with this condition as there is an increased risk of rupture at altitude. When booking a flight or holiday it is advisable to check with the airline at the same time. Some companies will provide cover as long as you have the permission of your consultant to fly.

Activity

Often the first description of an aneurysm can be frightening and many patients have concerns about returning to normal life for fear of causing the aneurysm to rupture. We encourage you to resume the normal activities that you undertook before you knew that you had this condition. If we have any concerns then these will be discussed with you. You should use this opportunity to optimize your health by stopping smoking and getting fitter in case you ever need to have surgery as this will reduce any complications occurring after surgery.

Vascular team contact details

If you require any further information regarding our services, or any queries about your management please contact Joy Lewis Vascular nurse specialist or the consultant managing your condition via the following telephone numbers.

Mr Jayatunga – Consultant Vascular surgeon Secretary – Alison Slater Tel no – 01384 244243

Mr Patel – Consultant Vascular surgeon Secretary – Joanne Webb Tel no – 01384 244021 Mrs Shiralkar – Consultant Vascular surgeon Secretary – Faye Langford Tel no – 01384 244246

Mr Pathak – Consultant Vascular surgeon Secretary – Maxine Winmill Tel no – 01384 244245

Mr Rehman – Consultant Vascular surgeon Secretary – Lara Golding Tel no – 01384 244176

Joy Lewis – Vascular Nurse Specialist Tel no – 01384 456111 ext 2329

Mark Black – Chief Vascular Scientist Tel no – 01384 456111 ext 2329

Darren Rhodes – Vascular Technologist Tel no – 01384 456111 ext 2329

Useful web addresses

- <u>www.nice.org.uk</u>
- <u>www.bvf.org.uk</u>
- <u>www.circulationfoundation.org.uk</u>
- <u>www.vascularsociety.org.uk</u>

Access to benefits

If you require information about benefits information can be found on:

www.direct.gov.uk

www.dwp.gov.uk

or your local Benefits office.

Your comments

Patient Advice and Liaison Service (PALS) Freephone 0800 073 0510.

PALS is here to support patients, relatives or carers when they have concerns or queries. They will do their best to resolve any concerns you may have and can also give advice on making a formal complaint.

If you have any questions or if there is anything you do not understand about this leaflet please see contact information in 'Further information' section

This leaflet can be made available in large print, audio version and in other languages, please call 0800 0730510

ਜੇਕਰ ਇਹ ਲੀਫ਼ਲੈੱਟ (ਛੋਟਾ ਇਸ਼ਤਿਹਾਰ) ਤਸੀਂ ਆਪਣੀ ਭਾਸ਼ਾ (ਪੰਜਾਬੀ) ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਕਿਪਾ ਕਰ ਕੇ ਪੇਸ਼ੰਟ ਇੱਨਫ਼ਰਮੇਸ਼ਨ ਕੋ-ਆੱਰਡੀਨੇਟਰ ਨਾਲ 0800 0730510 ਟੈਲੀਫ਼ੋਨ ਨੰਬਰ ਤੇ ਸੰਪਰਕ ਕਰੋ।

यदि आपको यह दस्तावेज अपनी भाषा में चाहिये तो पेशन्ट इनफरमेशन को-आरडीनेटर को टैलीफोन नम्बर 0800 0730510 पर फोन करें।

જો તમને આ પત્રિકા તમારી પોતાની ભાષા (ગુજરાતી)માં જોઈતી હોય, તો કૃપા કરીને પેશન્ટ ઈન્ફોર્મેશન કો-ઓર્ડિનેટરનો 0800 0730510 પર સંપર્ક કરો.

আপনি যদি এই প্রচারপত্রটি আপনার নিজের ভাষায় পেতে চান, তাহলে দয়া করে পেশেন্ট ইনফরমেশন কো-অর্ডিনেটারের সাথে 0800 0730510 এই নম্বরে যোগাযোগ করুন।

أذا كنت ترغب هذه الوريقة مترجمة بلغتك الاصلية (اللغة العربية), فرجاءا أتصل بمنسق المعلومات للمريض

Information Co-ordinator على التلفون 0800 0730510 على

حب شرورت ال لیف ایٹ کوانٹاز بان (اردو) میں حاصل کرنے کے لئے براہ مہر ہائی لیلیون نمبر 0800 0730510 بوطنت الفرمیشن کو۔ادرا یلیز (سریعنوں کے لئے مطومات کی فراہمی سے سلسلے مى الر) ك ماتحد اطرقا مم كرى-

Originator:

Version[.]

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12