

# Information for patients who require an Abdominal Aortic Aneurysm repair with a stent graft- Endovascular Aneurysm Repair (EVAR)

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## Why do I need this operation?

The aorta is the largest artery in your body, it carries blood away from your heart. Your aorta runs through your chest, where it is called the thoracic aorta. When it reaches your abdomen, it is called the abdominal aorta. The abdominal aorta supplies blood to the lower part of the body. Just below the abdomen, the aorta splits into two branches that carry blood into each leg.

When a weak area of the abdominal aorta expands or bulges, it is called an abdominal aortic aneurysm (AAA). The pressure from blood flowing through your abdominal aorta can cause a weakened part of the aorta to bulge, much like a balloon. A normal aorta is about 1 inch (or about 2 centimetres) in diameter. However, an AAA can stretch and weaken the aorta. Aneurysms are a health risk because they can burst, or rupture. A ruptured aneurysm can cause severe internal bleeding, which can be fatal.

AAA can cause another serious health problem. Clots or debris can form inside the aneurysm and travel to blood vessels leading to other organs in your body. If one of these blood vessels becomes blocked, it can cause severe pain or even more serious problems, such as limb loss.

Fortunately, when diagnosed early, AAA can be treated, with highly effective and safe treatments such as a repair with a stent graft.

You may have had an ultrasound scan of your abdomen and will have a CT scan of the abdomen to give the vascular surgeon and radiologist as much information as possible about the aneurysm.

Your outpatient appointments will be with the vascular surgeon at Gateshead, however your pre assessment appointment and your operation will be performed at University Hospital of North Durham. Your operation will be performed by the vascular surgeon from Gateshead.

## How do I prepare for the operation?

Your surgeon will talk to you about what the operation involves together with the risks and benefits of having the operation. You will need to attend a pre assessment clinic at University Hospital Durham to establish your general health and an anaesthetist will talk to you about the operation

You may have some tests done as an outpatient, or you may be admitted to the hospital for a few days.

If you have previously had an allergic reaction to x-ray dye (contrast) you must tell your surgeon before the procedure.

It is very important that you stop smoking as this will decrease aneurysm growth. Advice can be given to you at the pre assessment clinic and by your practice nurse.

## **What are the benefits of surgery?**

The surgery will repair the aneurysm and reduce the risk of it bursting.

## **Are there any alternatives to surgery?**

Your doctor has decided that surgery with a stent graft is the most suitable form of surgery for you. However you can discuss this with the surgeon at your outpatient appointment. You can decide not to have an operation. The aneurysm may burst and this will cause internal bleeding that may cause death. The way that you live your life and the care you take of yourself may prevent further damage from being done but will not cure you. A healthy diet, exercise and stopping smoking may help.

## **What happens if I decide not to have the operation?**

If you do not have the operation the aneurysm may get bigger, the artery walls will get weaker and the risks of a rupture will increase. Only 2 in 10 patients survive a rupture, with half of patients dying before they reach a hospital.

## **What complications can happen?**

Complications following surgery can happen but are not usual. Some complications from the operation are less serious and may include swelling or inflammation at the incision site, bruising and infection around the wound site. Others, more specific to the operation are that the operation may cause problems with your bowel being slow to start working properly again.

The stent may leak where the parts of the stent join together. Blood can leak back in the aneurysm sac through small arteries feeding the aneurysm sac. Some of the leaks stop by themselves and are not dangerous, but others need to be treated. These leaks can occur years after the procedure, you will be asked to have regular CT and ultrasound scans to detect such problems.

The join between the stent and the artery may develop a false aneurysm (1 in 33 risk); this is potentially dangerous and may result in further surgery. There is a 1 in 50 risk that the operation may lead to the blocking of arteries in your legs. This may lead to another operation or more rarely to the amputation of a leg.

There is also a risk that your kidneys may become damaged (risk 1 in 14) by the Contrast (x-ray dye); if this happens a machine may be used to take over the job of your kidneys for a while. Men may have problems achieving an erection (1 in 5), this can happen due to the nerves in your abdomen being damaged during the operation.

The risk of death for a planned stent graft operation is 1 in 50, and the risk is 1 in 2 for an urgent operation to repair a ruptured aneurysm.

Your vascular surgeon will discuss the important risks and benefits with you and answer your questions. When you have had this discussion you will be asked to give your consent for the operation.

## **What happens during the operation?**

The operation is carried out under a general or spinal anaesthetic. The vascular surgery team will clean your skin and shave hair around the groins to help decrease your chances of infection. The vascular surgeon will then cut into the skin above the artery in your groins. The Radiologist passes a guide wire into your artery and advances it to the aneurysm, using x-rays to guide him. The radiologist inserts a catheter over the guide wire. The catheter carrying a compressed form of the stent graft is moved through your arteries. When the stent graft has reached the aneurysm, the radiologist withdraws the catheter, leaving the graft in place. The graft expands to fit snugly against the walls of your artery. X-rays are used to guide the stent graft into place during your operation; every effort is made to keep the x-ray dose to a minimum. The vascular surgeon will close the incisions in your groins.

## **What happens after the operation?**

For the purpose of special monitoring you may go to the critical care unit for 24 hours or until the doctor is happy for you to return to the ward. You will have a catheter in place to collect urine from your bladder. You will have a drip giving you fluid until you feel awake enough to drink. You may have an oxygen mask in place. This is to aid your breathing after the anaesthetic. A wound drain is sometimes inserted in the area of the wound dressing. We aim to keep you free from pain and any feeling of sickness, please tell the nurse if you are uncomfortable. You should be able to go home after about 2-4 days; however your doctor may recommend you stay longer. If you are worried about anything, in hospital please feel free to talk to a member of the nursing team on your ward or department. If you are at home you may contact the Vascular Nurse on the number at the end of this leaflet.

## **How soon will I be back to normal?**

Be guided by how you feel but expect to be tired for at least 4 to 6 weeks. It can take several weeks to regain your strength. If you do have any concerns do not hesitate to contact your GP, or the vascular nurse specialist. You should be able to return to work within 3-4 weeks of the operation. Your GP will advise you about work when you visit for your sick-note.

If you drive, you need to be able to perform an emergency stop safely. You may need to contact your insurance company about this.

You should make changes in your lifestyle to preserve the success of your surgery. You should consider changes that will help lower your blood pressure and decrease the chances that plaque (narrowing of the arteries caused by fatty deposits) will affect your graft or other arteries. These changes include:

- Eating foods low in fat, cholesterol and calories
- Maintaining your ideal body weight
- Exercise, such as brisk walking, for 20 to 30 minutes at least five times per week
- Stopping smoking

## Where can I get more information?

If you require any further information or have any special needs the vascular nurse can be contacted Monday to Friday 9am-5pm on 0191 4452828 (answer machine)

Telephone NHS: 111 for advice outside of the above hours

Vascular surgical society of Great Britain and Ireland at [www.vascularsociety.org.uk](http://www.vascularsociety.org.uk)

Vascularweb.org

## Data Protection

Any personal information is kept confidential. There may be occasions where your information needs to be shared with other care professionals to ensure you receive the best care possible.

In order to assist us to improve the services available your information may be used for clinical audit, research, teaching and anonymised for National NHS Reviews. Further information is available in the leaflet Disclosure of Confidential Information IL137, via Gateshead Health NHS Foundation Trust website or the PALS Service.

**This leaflet can be made available in other languages and formats upon request**