

Abdominal aortic aneurysm (AAA) open repair operation

The aim of this information sheet is to help answer some of the questions you may have about having an AAA open repair operation. It explains the benefits and risks of the procedure, as well as what you can expect when you come to hospital.

If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is AAA?

Arteries carry blood away from your heart to the rest of your body. An aneurysm occurs when the artery walls weaken. The pressure of blood flow can cause the artery walls to stretch and balloon out to form an aneurysm. The most common artery to be affected is the aorta, which is the main artery in your stomach. This kind of aneurysm is known as an abdominal aortic aneurysm (AAA).

What is an open AAA repair?

The traditional operation involves cutting open your abdomen to replace the aneurysm with an artificial piece of artery (a graft). This is a major operation and carries some risk. However, it is successful in most cases and the long term outlook is good. The graft usually works well for the rest of your life.

Why should I have open AAA repair?

If an aneurysm reaches a certain size, then surgically repairing it is advisable as there is a risk of it rupturing (bursting). This can lead to bleeding and even death.

It is important to remember that your surgeon will only recommend treatment for your aneurysm if he or she believes that the risk of the aneurysm bursting is much higher than the threat posed by the operation.

What are the risks?

As with any major operation, there is a risk of you having a medical complication. You may wish to read our leaflet, **Having an anaesthetic** for more information.

Risks specific to people having an AAA include:

- loss of circulation in the legs or bowel, which may need to be treated with further surgery
- infection in the artificial artery, which can be treated with antibiotics (this can be long term).

These complications are rare, but overall it does mean that some patients may not survive their operation or the immediate post-operative period.

Nationally, the risk of death from an open aneurysm repair is around 4.3%. In other words nearly 96 in every 100 patients will make a full recovery from the operation. The risk of this surgery at Guy's and St Thomas' is 0.3% (99 in every 100 patients will make a full recovery).

Other possible post-operative complications include:

- **Deep vein thrombosis (DVT) / Pulmonary embolism (PE):** After any large operation there is a risk of DVT (deep vein thrombosis) or PE (pulmonary embolism). You will be on medication to reduce the risk, but this cannot remove the risk completely. If you do get a DVT or PE you will need to take a course of tablets (warfarin) to thin the blood for a period of three to six months.
- **Chest infections:** These can occur following this type of surgery, particularly in smokers, and may require treatment with antibiotics and physiotherapy.
- **Wound infection:** Wounds sometimes become infected and this may need treatment with antibiotics. Serious infections are rare, but occasionally, the incision may need to be cleaned out under anaesthetic.
- **Graft infection:** Very rarely (in about one in 500 patients), the graft may become infected. This is a serious complication, and usually treatment involves removal of the graft.
- **Fluid leak from wound:** Occasionally the wound in your groin can fill with a fluid called lymph that may leak between the stitches. This usually settles down with time.
- **Bowel problems:** Occasionally the bowel is slow to start working again after the operation. This requires patience. You will be given fluids via a drip until your bowels get back to normal.
- **Impotence:** This may occur in men if nerves in the tummy are unavoidably cut during the operation. This occurs in about 10% of patients.

How can I prepare?

We will send you information about how to prepare for your hospital stay with your admission letter. Please read this information carefully.

We will review your regular medicines when you come to hospital for your pre-admission appointment. If you are taking any antiplatelet medicines (such as aspirin or clopidogrel) or any medicines that thin the blood (such as warfarin), then you may need to stop them temporarily before the procedure. If you are taking any medicines for diabetes (for example, metformin) or using insulin, then these may also need to be stopped temporarily or the dose altered near the time of the procedure. You will be given full information on any changes that you need to make to your medicines at the pre-admission clinic – please ask us if you have any questions.

We will ask you to fast for six hours prior to the surgery. Fasting means that you cannot eat or drink anything (except water) for six hours before surgery. We will give you clear instructions when to start fasting. It is important to follow the instructions. If there is food or liquid in your stomach during your operation it could come up to the back of your throat and damage your lungs. Please continue to take your regular medicines with a sip of water before 6am on the morning of the procedure, unless you have been told otherwise.

Giving my consent (permission)

We want to involve you in all decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This confirms that you agree to have the procedure and understand what it involves. You should receive the leaflet, **Helping you decide: our consent policy**, which gives you more information. If you do not have a copy, please ask us for one.

Before going into hospital

Before aneurysm surgery, there are a number of tests that need to be done. These are done for two reasons:

- to assess your general fitness for surgery
- to assess your suitability for different types of aneurysm surgery.

The following tests are normally done before your doctor makes a decision on whether or not to operate:

- Blood tests
- Electronic heart monitoring (ECG)
- Echocardiogram (an ultrasound test of the heart)
- Breathing test
- A CT scan of the aneurysm (which shows a computer image of the size and position of your aneurysm)
- Chest x-ray.

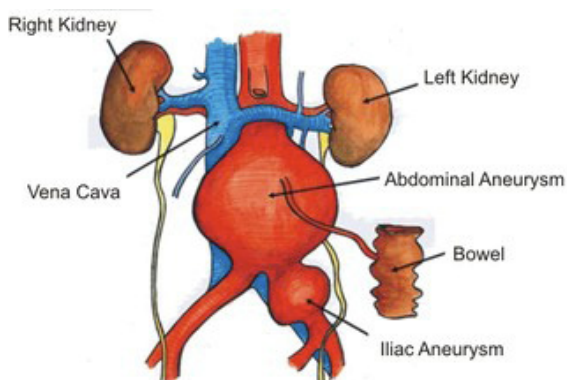
What happens during the operation?

You will have a cut, either down your stomach (from your belly button to the top of your stomach) or across your stomach.

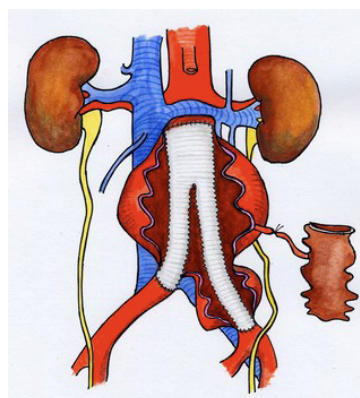
The enlarged segment of aorta will be replaced by an artificial blood vessel (graft). Sometimes this will be a simple tube and sometimes, as in the illustration below, a branching graft is used.

The aneurysm is closed over the graft at the end of the procedure to separate it from the overlying structures.

The wounds are closed with either stitches under the skin that dissolve, or by metal clips that will need to be removed about 10 days after the surgery.



An abdominal aortic aneurysm



The position of the graft

Will I feel any pain?

Just before your surgery, you will be given a general anaesthetic, which means that you will be asleep during the operation. A tiny needle will be placed in the back of your hand. The anaesthetic is injected through the needle and you will be asleep within a few seconds. You may also have a small tube placed in your back called an epidural, which will help deliver pain relief after surgery. Alternatively, you may be given pain relief via a machine that delivers painkillers directly into your vein through a drip. The machine allows you to control the dosage yourself by pressing a button.

What happens after the procedure?

After the operation you will spend the first night in overnight intensive recovery (OIR) so that your progress can be closely monitored. It is usually necessary for you to remain on a breathing machine for a short period after the operation but you will be taken off this as soon as possible.

The following morning you will see your surgeon and the anaesthetist and they will decide whether you will be transferred to the intensive care high dependency unit (HDU) or to V-Bay (vascular bay) on Luke Ward. This will depend on the amount of monitoring you require. Following this sort of surgery the bowel can stop working for a while, but you will be given all the fluids you require through a drip until your bowel can cope with fluids by mouth.

As in any major open surgery, there will be some blood loss and it may be necessary for you to have a blood transfusion.

Over the following few days as you start to recover, the various tubes will be removed. If you are in intensive care or HDU you will return to Luke Ward until you are fit enough to go home (usually 8–10 days after the operation). You will be seen by the physiotherapist every day from the first day of your operation to help you get moving. It is important that you get out of bed and practice deep breathing in order to prevent getting a chest infection. You will gradually be reintroduced to food and drink.

What do I need to do after I go home?

If your stitches or clips are the type that need removing, this is usually done whilst you are still in hospital. If not we will arrange for either a practice nurse at your GP surgery or a district nurse to remove them and check your wound. Your dressing will also usually be removed before you leave hospital. If you still need a dressing when you go home we will arrange for a practice nurse or district nurse to change it regularly.

You will feel tired for many weeks after the operation but this will improve as time goes by. In the meantime, you may find the following advice useful:

Exercise: Regular exercise such as short walk combined with rest is recommended for the first few weeks, followed by a gradual return to normal activity.

Driving: You will be able to drive once you can safely perform an emergency stop safely. This will normally be three to four weeks after surgery, but if in doubt check with your own doctor. You should inform your insurance company that you have undergone major surgery to make sure that you are covered.

Bathing: Once your wounds dry you may bathe or shower as normal. This will normally be before you leave the hospital.

Working: If you have a job, you should be able to return to work between six and twelve weeks after surgery. Your GP will advise you of this when you see him/her for your sick note.

Lifting: You should avoid heavy lifting or straining for six weeks after the operation.

Medicines: You will usually be sent home on a small dose of aspirin and a statin (cholesterol-lowering medicine), if you were not already taking them. This makes the blood less sticky and reduces your cholesterol levels. If you are allergic to aspirin, or if it upsets your tummy, an alternative drug may be prescribed.

Will I have a follow up appointment?

After you have left hospital, you will receive an appointment to see your surgeon approximately six weeks later.

Appointments at King's

We have teamed up with King's College Hospital in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at King's. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

Contact us

If you have any questions or concerns before or after you have left hospital, please contact the **vascular specialist nurses on 07825 503902** (Monday to Friday 8am – 4pm).

You can also contact **Luke ward on 020 7188 3566 or Sarah Swift ward on 020 7188 8842** (24 hours) and speak to the ward sister or nurse in charge.

The above contacts can put you in touch with the following vascular consultants should you wish to do so: **Miss Rachel Bell, Mr Stephen Black, Mr Tom Carrell, Mr Michael Dialynas, Mr Tommaso Donati, Mr Bijan Modarai, Mr Morad Sallam, Mr Mark Tyrell, Mr Hany Zayed, Mr Said Abisi, Mr Andrew McIrvine.**

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

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