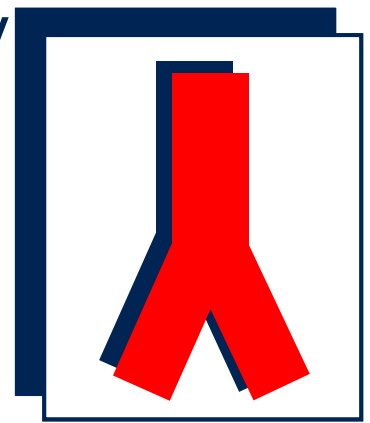


Will Butcher – Vascular Surgery

Patient information



Information to help you understand Endovascular Aortic Aneurysm Surgery *Sometimes called keyhole surgery for Aortic Aneurysm*

Why do I need this operation?

The aorta is the main artery in the tummy and carries blood to the major organs and legs. This has become enlarged like a balloon, this is called an abdominal Aortic Aneurysm (AAA). This condition is concerning because as the AAA get bigger so the risk of it bursting also gets higher. During this operation a man-made artery (graft) is used to bypass the aorta.

What preparation is necessary?

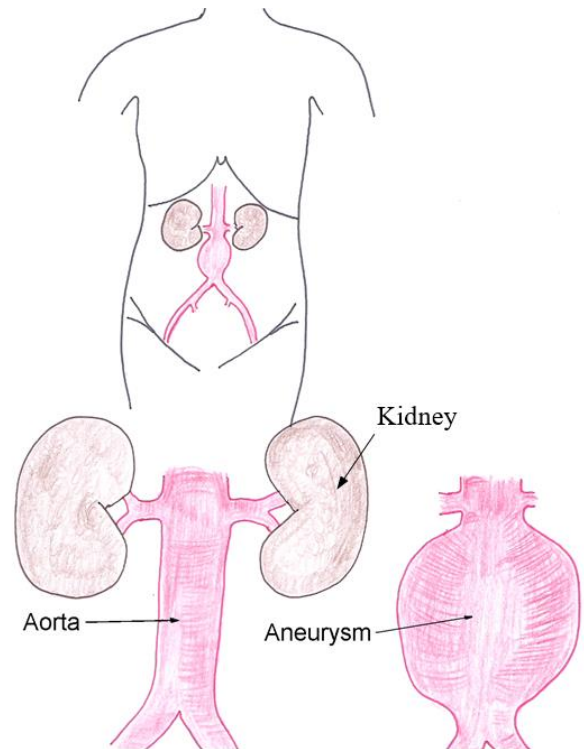
You will have usually had a scan of the AAA performed, which shows us that the operation is necessary. A scan of the heart and a breathing test will also be done together with some blood tests. Some patients whose hearts are not in good shape will be asked to visit a cardiologist (heart doctor) before the surgery. Most of this will be arranged from outpatients.

What happens when I first come into hospital?

Most patients are admitted on the day of their surgery, others the day before. When you arrive, the Medical team will be informed that you are in, and will check that everything is ready. One or two last blood tests may be done. We will ask you to sign a consent form or confirm your consent if you have already signed. Before the surgery you will meet the anaesthetist and your surgeon will come and see you as well. If you have any last questions you should bring them up then

What should I bring with me?

You should bring all your current medication with you. It is sensible to bring a small bag of toiletries and a pair of comfortable pyjamas. Try and avoid bringing anything too valuable or precious with you as things can go missing in hospital.



What exactly does the operation entail?

Before the surgery you will not have anything to eat for approximately 6 hours. At the appointed time some members of the operating department team will come to the ward to collect you. Sometimes a light sedative pre-medication will be given to you as well. After a short wait in the theatre complex, you will be moved to the anaesthetic room. Here you will see the anaesthetist again. A needle will be inserted into your arm. Once this has all been done, a drug will be injected through the needle in your arm, which will make you go to sleep.

In order to repair an aneurysm by the keyhole method, a graft is mounted on a special spring. The graft and spring assembly (endograft) is carefully compressed and inserted into a special sheath that looks a bit like a drinking straw. This device is then inserted through an artery in the groin. The final

repair consists of several components, which are assembled inside the aneurysm.

A cut will be made into each groin to expose the femoral artery. On both sides a special wire called a guide wire will be inserted into the artery. Over these wires the various components of the endograft in its sheath are inserted into the aorta. Using an xRay machine the position of the endograft components are carefully checked. When they are in the correct position the sheath is carefully withdrawn allowing the spring to open up and fix the endograft into position.

Once the endograft is assembled the wounds in your groin are stitched closed. The sutures will generally be of the dissolving type and will not need to be removed.

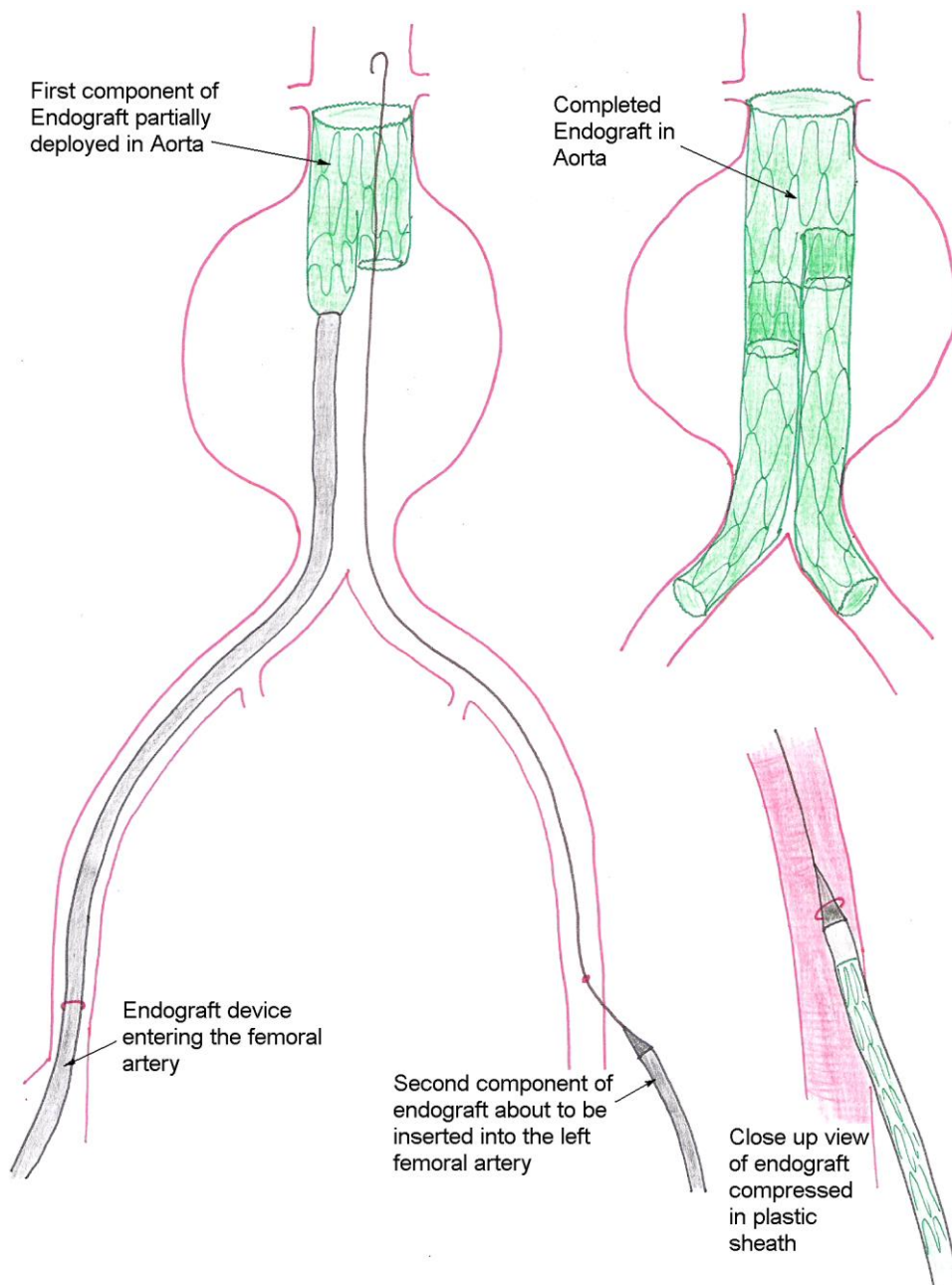
Once the operation is complete you will be transferred to the recovery area to wake up. This can be a slightly frightening environment. Once you are awake and your pain is under control, you will be moved back to the ward.

Is it a big operation?

No this is not very big surgery. But you should remember that all operations should be considered very carefully. Also often the patients in whom we offer this type of surgery are often elderly and this will influence the recovery.

What will happen in the ward?

You will be back in your own bed and will have intravenous fluid passing into a vein in your arm via a 'drip'. You will also have a catheter (a plastic tube in the bladder) so that you can pass water without having to get to the toilet. The catheter and drip are temporary but necessary until you are able to walk comfortably and drink without feeling sick. Sometimes your breathing may be helped by giving you extra oxygen through a mask. The nurses will usually get you up on the day after your operation.



Most patient will be able to tolerate food on the day of surgery.

Pain: Pain following surgery is inevitable, we will be giving you pain killers to reduce this. They are administered in several ways:

- Small volumes of powerful pain killers may be injected directly into a vein in your arm, these may make you a bit sleepy as well, so they are quite useful in the beginning
- Sometimes we start a medication which is into the vein but which you have control over. Whenever you feel pain you will be able to press a button, which will trigger a machine to give you a small dose of pain killer. This is a very safe and effective form of therapy.
- Finally, once you are well enough, you will be able to take a variety of medications by mouth.

How long will I be in Hospital?

Most patients are admitted on the day of surgery or the day before, and go home after about 3 or 4 days. If things go well it may be a bit shorter than this, but sometimes it does take longer.

What happens when I go home?

Once you are well enough to cope at home, you will be discharged. Once you get home you should gradually return to all your normal activities. In general you can do anything that you like within the limits of your pain. At first though you will find that even quite small tasks like dressing and showering will be exhausting. As soon as you feel you can manage it you should start a gentle exercise program like having a short walk once and then twice a day. Be sure to allow yourself proper rests in-between.

Sutures: Most patients will have dissolving stitches that do not need to be removed.

Driving: There are no particular rules about driving after this sort of surgery. In general, you should be able to safely depress the pedals and perform an emergency stop before starting to drive again. It is probably wise to go for a short safe drive with someone you trust before making the decision to start driving. If in doubt you should check with your own doctor.

Washing: Once your wound is dry you may bathe or shower as normal. Usually this means that you can have a shower when you get home. It is probably unwise to get into the bath for a little while as getting out can be painful following major surgery.

What complications may occur?

Unfortunately all surgery can have complications and this is no exception.

What will happen?

There will be various scars as described. These all usually heal up very well.

Your legs and other lower parts may swell a bit following the surgery, this is normal and is caused by fluid retention.

There will be some bruises on your arms from the injections and drips.

Almost always following removal of the catheter in your bladder there is often some difficulty controlling

your water works properly, this also settles down quite soon.

Your sleeping patterns will be disturbed by the ward routine and by medication. This will recover once you get home.

Complications that may occur:

Chest infections can occur following this type of surgery, particularly in smokers, and may require treatment with antibiotics and physiotherapy.

The wounds can sometimes become infected, this can usually be successfully be treated with antibiotics. Occasionally though, the infection may be more serious and some stitches may need to be removed. If this is the cases the wound will need dressing for quite some time before it heals.

The wound in your groin can fill with a fluid called lymph that may discharge between the stitches but this usually settles down with time

Any medical condition, which you may have can become unstable following this sort of surgery and so it is not unusual for your needs for medication to alter during this time.

It is also not usual for elderly patients to become confused or disorientated during a stay in hospital

Complications which occur infrequently

As with any major operation such as this there is a very small risk of you having a major medical complication such as a heart attack or stroke. We do everything we can to prevent these complications and to deal with them rapidly if they occur.

A clot may form in the deep veins in your leg. This is called a DVT. We give you medication to prevent this happening but it still may occur. Usually it can simply be treated with medication. In a very small percentage of patients this clot can travel to the lung and as such can be life threatening.

Death

Although we do everything in our power to prevent it, this may still occur. In fact we recognise that a few patients will die during this surgery. You can be assured that this is in line with what occurs all over the world.

Once it's all over?

If you were previously a smoker you must make a sincere and determined effort to stop completely.

Continued smoking will cause further damage to your arteries and your graft is more likely to stop working. General health measures such as reducing weight, a low fat diet and regular exercise are also important. We will ask you to take a low dose of aspirin every day to help to thin the blood. If you can not take aspirin, there are alternatives. You should also be taking a drug to reduce cholesterol. If not you should talk with your GP about this. I will generally see you back in the rooms in 4 weeks.

Surveillance

After this type of Aneurysm surgery it is very important that your surgeon or their team keep an eye on the graft. These grafts may slip or move after the surgery. While this is unusual, it is usually easy to correct if found early. At first the scans will be frequent (at one month then three months and six months), but in time will move to an annual schedule. Mostly a simple jelly scan of your tummy (ultrasound) is all that is needed. More complex scans (CTScan) could be used to check if there are concerns.

More information

The first sensible step is to discuss your problem with your GP or surgeon, they will be best positioned to explain what to expect.

If you need more information you can go to one of these vascular organisation's websites:

The Australia and New Zealand Society for Vascular Surgery.

www.anzsvs.org.au/patientinformation/

The Vascular Surgical Society for Great Britain and Ireland.

www.vascularsociety.org.uk/patients/