





Why is the operation necessary?

The aorta is the big artery carrying blood from your heart to your legs. It runs deep in your abdomen down to the level of your belly button, where it branches into the two leg arteries. Sometimes the aortic wall can weaken and expand to form an aneurysm (blowout). This is dangerous because the aneurysm can leak or burst, causing fatal internal bleeding. The aneurysm needs to be relined with a stent graft to prevent it from bursting.

The risk of bursting depends on the size of the aneurysm and is usually considered once the aneurysm reaches 5.5cm in diameter.

What is the procedure?

The stent graft is a selfexpanding , reverse Y shaped, metallic device lined by a tough plastic fabric. It comes in two components: One is introduced through the groin via the iliac artery (the main artery going to the leg), and the top end placed into the aorta above the aneurysm, below the kidney arteries. The bottom end sits in the iliac artery below the aneurysm. The other limb of the graft is introduced through the opposite groin and made to interlock with the first component in the middle of the aneurysm. A cut is made in each groin to expose the leg arteries, but it is not necessary to open the abdomen. X-rays are used during the procedure so that the device can be accurately placed.

Once expanded the stent graft occupies the entire channel of the aorta or iliac artery and thus only allows blood to pass through the stent graft and not through the aneurysm with the weak wall. The blood in the aneurysm around the stent graft simply clots and stays there forever. Without any blood flowing in the aneurysm it cannot burst.

Are there any alternative treatments available?

The options if you need an aneurysm repair are either EVAR (stent graft repair) or an open operation.

Is the operation safe?

Before you agree to the procedure, you should consider the risks that may be involved. Your procedure will be performed by a team of highly qualified and skilled professionals who will take all steps necessary to ensure a safe procedure and a successful result. However, there are risks involved with all procedures, even if these risks may be small

What are the General Risks related to this procedure?

There are risks for developing complications which are general, and which may occur with any surgical procedure.

These complications include the risk of infection, bleeding, pain, wound breakdown, deep vein thrombosis, or complications affecting the heart, lungs, or kidneys.

What are the specific risks related to this procedure?

A fever for a few days is normal. The reason for this is uncertain but it is usually not serious. Occasionally clots can form in the stent graft and require surgical removal. Chest infections can arise, particularly in smokers. Fluid can drain out of the groin wound for a few days. Occasionally bleeding in the wound may cause a haematoma. These usually reabsorb on their own but occasionally need a further operation to drain them. A problem particular to EVAR is an "endoleak". This means that there is still some blood flowing through the aneurysm itself. Most endoleaks noted at the time of the operation or soon afterwards will seal on their own. Occasionally a further stent must be inserted later if the endoleak does not seal. A scan will be done before discharge to check that the stent graft is working well and that there is no endoleak. Further scans are required every three months for the first year and annually thereafter, but these

will all be arranged for you. Other major complications of EVAR include heart rhythm disturbances, heart attack, chest infections, kidney failure and damage to the blood supply to the large intestine or spinal cord (causing paraplegia). These complications are very uncommon (< 1%) but may have serious consequences or require further procedures to resolve. Your stay in hospital may be increased.

Pre-Admission and Registration

Before your admission, you should register your details with the hospital's Pre-admission Clinic. This allows the hospital to register all your personal and medical aid details, which greatly reduces the time and paperwork it takes to admit you on the day of your operation. If you are not a member of a médical aid you will have to pay a deposit for the hospital costs on admission. If you are on a medical aid you will need to get pre-authorization for the procedure. Our staff will be able to assist you with the necessary details.

Before you agree to the procedure make sure you know:

- The name of the procedure
- The reason you are having the procedure
- What results to expect and what they mean
- The risks and benefits of the procedure
- What the possible side effects or complications are
- When and where you are to have the procedure
- Who will do procedure and what that person's qualifications are
- What would happen if you did not have the procedure
- · Any alternative procedures to think about
- Who to call after the procedure if you have questions or problems
- How much will you have to pay for the procedure



What do I need to do before the operation? You will be referred to a Specialist Physician prior to your operation, and will have various blood tests, an ECG and chest X-Ray performed. This is usually done before the operation has been booked.

Your surgeon may want you to stop certain medication such as clopidogrel, warfarin, Xarelto or other blood thinning medicines before the operation.

What happens when I get to the hospital? Please report to the hospital reception on time for your admission. Bring along all the documents that may be needed such as your medical aid card, ID, and contact details.

When you arrive in the ward, you will be welcomed by the nurses or the receptionist and will have your details checked. Some basic tests will be done such as pulse, temperature, blood pressure and urine examination. You will be asked to hand in any medicines or drugs you may be taking, so that your drug treatment in hospital will be correct. Please tell the nurses of any allergies to drugs or dressings.

The surgeon will have explained the operation and you will be asked to sign your consent for the operation. If you are not clear about any part of the operation, ask for more details from the surgeon or from the nurses. The operation area may need to be shaved to remove excess hair. You may be issued with compression stockings that will help prevent blood clots in your legs.

You will be taken on your bed to the operating suite by the staff. You will be wearing a cotton gown. Wedding rings will be fastened with tape and removable dentures will be left on the ward. There will be several checks on your details on the way to the operating theatre where your anaesthetic will begin.

Visit By The Anaesthetist

The anaesthetist who will be giving your anaesthetic will ask about chest and heart troubles, dental treatment, and any previous anaesthetics before examining you. The anaesthetic procedure and the risks associated with anaesthesia will be explained. You will require a general anaesthetic or a regional anaesthetic (spinal) for this procedure

When Should I Stop Eating?

You can have your usual diet (solids) up until 6 hours before the operation. From then till 3 hours before the operation you are allowed to drink clear fluids like water and apple juice, after which you will be asked to take nothing by mouth. This will allow your stomach to empty to prevent vomiting during the operation.

What Time will My Operation Be? The timing of your operation is pre-arranged, and the nurses will tell you when to expect to go to the operating theatre.

Changes to the exact timing are common however, as emergency procedures must be accommodated, and the time taken for the operations can be unpredictable.

We occasionally need to change the scheduling of cases on a particular day, but you operation will always be done on the day that it is scheduled. You may have to wait longer than we had hoped for reasons that are beyond our control.

The Operation

The operation will be performed as discussed with you beforehand. Occasionally the findings during surgery are unexpected, and the procedure must be modified. The surgeon will then complete the procedure as he sees fit, using his specialist expertise and experience to optimise your safety.

How Long Does the Operation Take? Approximately 2-3 hours

What Happens When I Wake Up?

Although you will be conscious a minute or two after the operation ends, you are unlikely to remember anything until you are back in your bed on the ward. Some patients feel a bit sick for up to 24 hours after operation, but this passes off. You will be given some treatment for sickness if necessary You will be transferred back to the ward, or sometimes to High-Care, especially if there has been any problem during the surgery, or if specific problems were found before the operation.

Will I Have Pain?

Some pain will be present, but this can be controlled to the level of mild discomfort with the painkillers. Ask the nursing staff for painkillers if you have pain.

How Soon After the Operation Can I Eat? You will be allowed to drink fluids straight after the surgery and will usually be allowed food 4 to 6 hours later.

How Soon After the Operation Can I Get Out of Bed?

You should be able to walk without too much discomfort by the next day and will be encouraged to mobilize as much as possible.

Activity And Physiotherapy

Activity and staying mobile tollowing surgery are recommended and helps to reduce chest complications. A physiotherapist may help with this process. Coughing and activity, although uncomfortable, will not harm your wound.

How Long Will I Stay in The Hospital? Usually, you will feel fit enough to leave hospital after 3 days.

What Happens When I Am Discharged from The Ward?

Your surgeon will decide when you are ready to go home. You will be given a script for pain medication, and you may also need to take antibiotics for a few days. You will also get an appointment for your followup in the surgeon's rooms for 1-2 weeks after discharge. You should ask for a sick certificate if you need this for your employer.

How Do I Manage the Wound?

The wound has a dressing, which may show some staining with old blood in the first 24 hours. The dressing will be changed for a clean one. It should stay in place for around 10 days. You can shower or bath with the dressing on. If the dressing comes off, just wash with soap and water, dry and replace. The skin is closed using staples or stitches. There may be some purple bruising around the wound which spreads downwards by gravity and fades over a few days. The cosmetic appearance of the wound gradually improves for one to two months after the operation.

What Should I Be Aware of When Home? There are a few problems that may arise only after you go home. Wound pain or redness, or any significant bleeding or drainage of excessive clear fluid from the wound should be reported. If you are unsure, then phone the doctor's rooms for advice. Wear your compression stocking during the day, keep the legs elevated when sitting or lying down.

How Soon Can I Start Exercise?

Maintaining activity and gentle walking soon after the operation is important. Start slowly and gradually build up. Formal exercise is allowed when the wound has healed, and the pain and bruising has subsided. This may take 3-4 weeks.

How Soon Can I Drive a Car?

You can drive as soon as you can make an emergency stop without discomfort in the wound, i.e., usually after about 10 days. You can safely wear a seat belt.

How Long Will I Be Off Work?

You are likely to feel a bit tired for a few weeks. You can expect to return to work and your normal activities in 4 weeks. Q

What About Payment?

The procedure and its associated costs will have been discussed with you, and a quote provided. Where procedures need to be unexpectedly altered during the procedure, the fee may change. Similarly, emergency procedures may incur an additional cost. Surgeons are highly trained, highly skilled professionals and throughout your care a member of the practice is available to attend to you 24 hours a day. In return we expect prompt payment of your account. Although accounts may be submitted to the medical aid, the patient is responsible for payment.