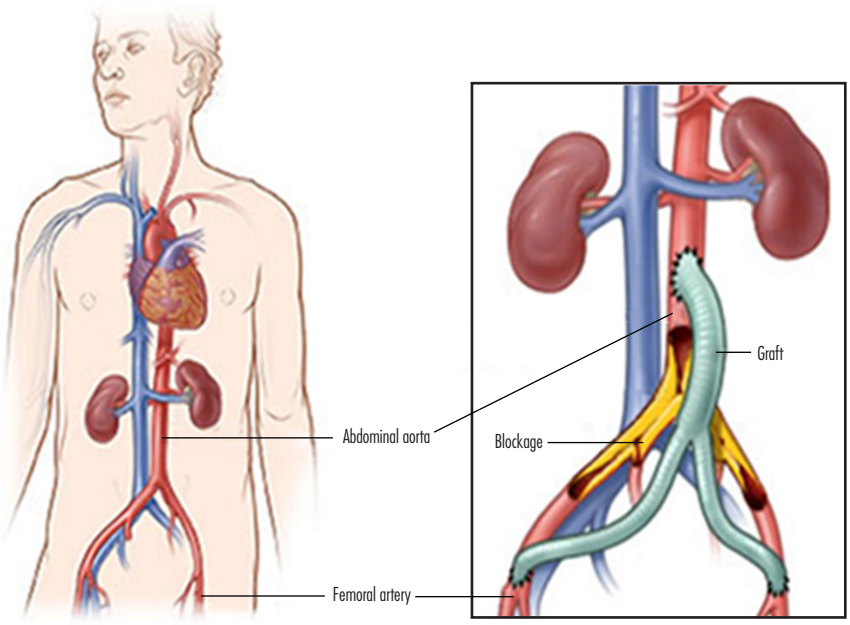
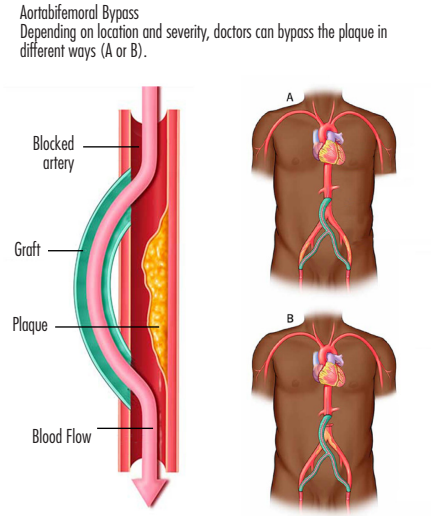
Cape Town Vascular specialist surgeons



Source: Healthwise, Incorporated



Source: Cleveland Clinic ©2023

Why is This Operation necessary?

The narrowing or blockage of the aorta and iliac arteries causes a severe lack of blood supply to the lower limbs. This may cause significant problems when walking. If more severe, there may be gangrene of the toes, or non-healing wounds or ulcers on the feet. If the operation were not done, then you could lose your legs.

What Is an Aorto-Bifemoral or Aorto-Bi-iliac Graft?

The operation is performed through an incision through the wall of the abdomen. This may be either straight up and down the midline, skirting the umbilicus, or from side to side, below the belly button. The choice of incision will be explained by your surgeon during the consultation before arranging the operation.

The aortic disease itself is treated by clamping the aorta above and below the damaged segment and replacing it with a new synthetic graft which is stitched into position. The top of the graft is stitched to the Aorta just below the kidney arteries. The bottom of the graft (which looks like a pair of trousers) will be stitched to the Iliac arteries (Aorto-bi-iliac graft) or to the groin arteries through two small separate incisions (Aorto-bifemoral graft).
The skin wounds will be closed up and dressed.

Are there any alternative treatments available?

The options for dealing with Aorto-iliac disease include

- Conservative (medication and exercise)
- Endovascular (Angioplasty or stenting)
- Endarterectomy (opening the damaged arteries, removing the blockages, and closing the artery cuts with patches), or
- Bypass (Aorto-femoral, aorto-iliac, or axillo-femoral)

If your limbs are at risk, then conservative measures are no longer sufficient. Endovascular repair may be inappropriate if the disease is extensive, particularly if the aorta is blocked completely.

Axillo-femoral grafting is used only when patients are not fit enough for aorto-iliac or aorto-femoral grafting. Your surgeon will discuss these options with you and a decision as to which option is best will be taken with you.

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?

The commonest major complications are:

- Cardiac (Rhythm disturbances, heart attack or heart failure)
- Respiratory (partial collapse of one or both lungs – atelectasis, chest infection, fluid on the lungs)
- Kidney problems (Kidney failure which may require dialysis, bladder infections, difficulty with passing water after the catheter is removed).
- Occasionally problems with bleeding after the operation from the graft or within the abdomen occur which require urgent re-operation.

Other major or life-threatening complications are uncommon, but include:

- Deep Vein Thrombosis (DVT), Pulmonary Embolism (when a DVT travels to the lungs)
- Paraplegia (When the operative repair causes a lack of blood supply to the spinal cord)
- Colon Ischaemia (Loss of blood supply to the large bowel causing bowel death and peritonitis)
- Complications of related procedures (i.e. problems related to the lines and monitoring procedures used)
- Stroke

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

- Lower limb ischaemia (sudden loss of blood supply to the legs requiring urgent repair).

Lesser complications include
- drip site infections
- bladder infections
- wound haematoma or infection.

These complications may have serious consequences or require further procedures to resolve. Your stay in hospital may also be increased as a result.

Later complications include hernia at the abdominal wound site, problems where the graft has been joined to your own arteries or narrowing and blockage of the graft.

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 medical aid you will be required 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.

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 required 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 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. This operation is usually performed with a combined general anaesthetic and epidural anaesthetic which is important for post-operative pain relief.

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 have to be accommodated, and the time taken for the operations can be unpredictable.

We occasionally have to change the scheduling of cases on a particular day, but you operation will almost 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 has to 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 3 hours

What Happens When I Wake Up?

After the operation is completed, you will be transferred to ICU. You may be breathing by yourself and awake, or you may be fully sedated and, on a Ventilator, (Breathing machine).

This will have been explained to you beforehand as it may have been planned, especially if your lungs are in poor condition before the surgery.

If there have been problems during the surgery that necessitate post-operative ventilation, then this will be explained to you once you are awake.

You will have several drips in your arms and neck. One of these is to monitor your blood pressure (A-line), and one will allow careful heart monitoring (CVP line). You will also have an epidural catheter in place. This allows good pain relief and will allow you to breathe more comfortably. A catheter will be in your bladder. You will have a tube down your nose to drain your stomach.

If you are being ventilated, there will be another larger tube through either your nose or mouth into your windpipe.

There will be a fair amount of noise in the ICU from all the monitors. You will usually be discharged from ICU to the Ward after two days.

Will I Have Pain?

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

How Soon After the Operation Can I Eat?

You will not be given anything while being ventilated. Once the breathing tube is out and you are awake, you will be given ice to suck or small sips of water.

The bowels are lazy for a few days after surgery, and taking food before they are working may cause vomiting and other problems. The stomach tube will be removed after a day or two, and fluids will be increased over the next two to three days before reintroducing solids once your surgeon feels that your bowels are ready.

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

You will be confined to bed for at least a day in ICU. You will probably sit in a chair on the second day, and only stand or walk with assistance on the third or following days. You will be assisted by a Physiotherapist when the process starts, and this will continue in the ward after you leave ICU. You will be encouraged to mobilize as much as possible.

Activity And Physiotherapy

Activity following surgery is 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 6 to 10 days. Your stitches (or staples) will usually only be removed when you come back for your first post-op visit.

What Happens When I Am Discharged from The Ward?
Your surgeon will determine when you are ready to go home. You will be given a script for medication for pain. You will be given instructions on the dressings and how to care for the wound. You will get an appointment for your follow-up in the surgeon's rooms. 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.

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 2 weeks.

How Long Will I Be Off Work?
You are likely to feel a bit tired for a few weeks. You can return to work and normal activities in 4-6 weeks.

What Should I Be Aware of When I Get Home?
You will feel very tired and washed out for some time.

Be aware that this is normal, so don't try to do too much.

You may walk around the house and garden, but don't do anything more adventurous than this before you see your surgeon for your first post-op visit.

It will be at least 6 weeks before you should lift any heavy weights or do any strenuous exercise.

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.