Aorto-bifemoral and axillo-bifemoral bypass

The aim of this information sheet is to help answer some of the questions you may have about having an aorta or axillo-bifemoral bypass. 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 and concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is an aorta-bifemoral/axillo-bifemoral bypass?
Arteries carry blood away from your heart to the rest of your body. When the main arteries in your stomach (the aorta and iliac arteries) are significantly narrowed, this affects the blood supply to your legs.

Both of these operations are done to improve the blood supply to your legs.

What happens during the operation?
The aorta-bifemoral operation recreates the normal shape of your aorta and femoral arteries (the main arteries in your stomach).

The procedure involves an incision in the abdomen to reach the aorta and also in the groins to reach the femoral arteries. A fabric tube in the shape of a pair of trousers is tunnelled under the skin and then sewn into the existing blood vessels, bypassing the blockages. This is known as aorto-bifemoral grafting.

The graft is then sewn into the arteries to connect them and restore blood flow to the legs. The wounds are closed either with stitches under the skin that dissolve or by metal clips that will need to be removed about 10 days after the surgery.
The **axillo-bifemoral** operation links your axillary artery in your shoulder to your femoral arteries in your legs using a flexible plastic tube called a graft. This restores the blood supply to your legs. The procedure involves an incision on your chest, just by your shoulder and into both of your groins. The graft is tunneled under the skin down the side of your chest and abdomen to your groin. The wounds are closed either with stitches under the skin that dissolve or by metal clips that will need to be removed about 10 days after the surgery.

The axillo-bifemoral operation creates less stress on the heart than the aorto-bifemeral operation, as it avoids opening the abdomen. However, in an axillo-bifemoral operation, the graft is more prone to complications, such as blockage and infection, as it is narrower and not well buried in the tissues.

**What are benefits – why should I have a bypass?**

By improving the blood supply to your legs, your symptoms should get better. The usual symptoms are aching muscles in the legs during exercise (known as claudication), which gets better on resting. Some patients may get a constant icy burning pain in the feet, known as rest pain.

**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. Complications specific to this procedure are deep vein thrombosis (DVT) or graft thrombosis, which could eventually lead to loss of the leg. The graft can get infected or blocked, which may require prolonged antibiotics or further surgery. This is rare.

**Are there any alternatives?**

If bypass surgery has been suggested to you it usually means the narrowing in your artery is severe. If you choose not to have surgery, medical treatment alone is unlikely to help.

**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 also send you information about fasting. Fasting means that you cannot eat or drink anything (except water) for six hours before surgery. We will give you clear instructions about whether you need to fast and when to start fasting. It is important to follow the instructions. If there is food or liquid in your stomach during the 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 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.

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?
if you need additional monitoring after the operation, you may spend the night in overnight intensive recovery (OIR). Alternatively, you will be cared for in V-Bay (vascular bay) on Luke ward.

If you have had an axillo-bifemoral you will be given something to eat and drink after the operation. If you have had an aorta-bifemoral then you be gradually reintroduced to food and drink over the first one to two days. Following this sort of surgery the bowel may stop working for a short while, but you will be given all the fluids you require via a drip until your bowel can cope with fluids by mouth. You will have a tube in your bladder for a day or so until you are able to get up and go to the toilet.

You will be seen by the physiotherapist every day from the first day of your operation in order to regain your normal mobility. It is important that you get out of bed and practice deep breathing in order to prevent getting a chest infection. You can expect to be allowed home approximately seven days after surgery.
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 a practice nurse at your GP surgery or 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 at your GP surgery or district nurse to change it regularly. It is fine to have a shower when you go home.

What can I do to help myself?
**Smoking**: If you are a smoker the single most important thing you can do to help yourself is to give up smoking. Stopping smoking will also help to protect all of your arteries making it less likely that you will suffer from heart attacks or strokes. Giving up is not easy but there is a smoking cessation service and support groups that can help. Your vascular specialist nurse or GP practice nurse can advise you about these.

**Inactivity**: Gentle exercise such as walking and cycling are recommended to help improve your overall level of fitness. Exercise helps your body to produce healthy cholesterol and this helps to protect your arteries against bad cholesterol.

**High blood pressure**: High blood pressure is a known risk factor for rupture of aneurysms. It is very important that you have your blood pressure checked regularly, at least every six months. If you have been prescribed medications for high blood pressure, you must make sure that you take it according to the instructions given.

**Diabetes**: If you have diabetes it is important that your blood sugar levels are well controlled.

**High blood cholesterol levels (fatty substance in your blood)**: You should eat a healthy balanced diet and try to reduce any excess weight. It is important to reduce the level of cholesterol in your blood. Your vascular nurse can refer you to a dietician if needed. You may be prescribed medication to help lower your cholesterol level (such as a statin) and low-dose aspirin to help prevent blood clots from forming.

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 Evan Jones ward 020 7188 2262 (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
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 To join, please call 0848 143 4017, email members@gstt.nhs.uk or visit www.guysandstthomas.nhs.uk

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