Lancashire Teaching Hospitals
NHS Foundation Trust

Information for patients and carers

Understanding AortoBifemoral Bypass Graft

Excellent care with compassion

Division of Surgery – Vascular Department

@LancsHospitals

Why do I need the operation?

There is a narrowing or blockage in the main arteries taking blood to your legs. This is caused by hardening of the arteries (atherosclerosis). Over the years cholesterol and calcium have built up inside the arteries and caused this narrowing or blockage. The operation you are having is to bypass the blocked arteries to improve the blood supply to your legs. Aortobifemoral bypass graft is designed to take blood from your aorta to the femoral (groin) arteries when there is a narrowing to the lumen (inside of the arteries) of the aorta and iliac arteries (major arteries to the legs).

Benefits of the surgery

- You will be expected to be able to walk comfortably for longer distances
- Limb salvage (to save the leg which is at risk)
- The pain you are having is likely to be reduced
- If your sleep was interrupted due to pain at night, it is expected to resolve
- Any ulcers you have should heal with time

Risks of surgery

- Graft failure - immediate/late
- Heart attack (Myocardial infarction (MI))
- Stroke
- 3-5% mortality (Can vary widely depending on your pre-op condition. Your consultant can give you a personal risk level and expected survival rate)
- 1-5% limb loss
- Graft infection (this is rare but would require long term antibiotics and possibly surgery to remove the graft)
- Kidney damage
- Chest Infection
- Disruption to the way your bowel works (may be slow to get working again). 1-2% risk of bowel ischaemia (which

may result in the formation of a colostomy)
- Wound infection
- Fluid leak from the groin wounds
- Deep vein thrombosis (DVT)/Pulmonary embolism (PE) - blood clots in legs/lungs
- Bleeding
- Impotence may occur in around 10% of men due to the nerves in your abdomen having to be cut during the surgery
- Nerve damage

How can I help myself?

The risk factors for developing disease in the arteries include smoking, high blood pressure, poorly controlled diabetes, high cholesterol and being overweight. By now, your risk factors should have been treated. You should be taking an aspirin or alternative antiplatelet tablet/anticoagulant and a statin to reduce cholesterol. If you have high blood pressure, you will have medication to control this.

Smoking

If you are still smoking it is important that you give up. Smoking speeds up the process of hardening of the arteries and clamps down on the small collateral vessels (extra blood vessels which help to take blood around a blocked artery) reducing the amount of blood and oxygen going to the muscles. There is scientific evidence that your bypass graft is more likely to fail if you continue to smoke. There is help available to everyone who wants to give up smoking. You can access this via your GP or local stop smoking service (You can contact the Quit Squad on freephone 0800 328 6297).

Exercise

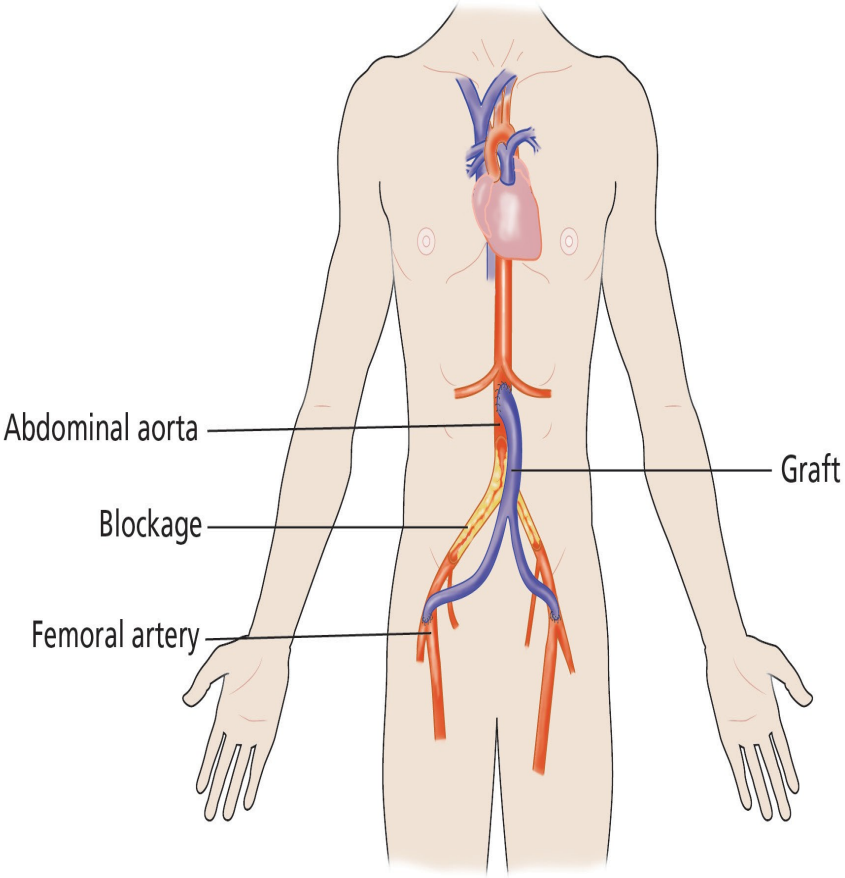
There is evidence that people who take regular exercise develop better circulation. Walk at an easy pace until you experience pain and stop. Continue again when the pain disappears. Try to walk a little further each day and you should find that the distance you can manage without pain steadily increases.

If overweight, try to lose some, you can discuss weight loss and diet with your GP or practice nurse. If you have high cholesterol you will need a low fat diet, statin therapy may be considered by your GP.

Before the operation

You will have a number of tests to determine the extent of the blockage and the procedure required. If you are not already in hospital, you will be asked to attend the hospital for a pre-operative assessment before your operation. This will allow time for tests to be done to ensure you are fit for surgery. You will be able to talk to one of the vascular specialist nurses who will answer any questions you have.

You will be admitted on the day of the operation (a letter will be sent to you from the waiting list department with instructions including when to stop eating and drinking). The nurses will help you prepare for theatre. The anaesthetist will visit you on the ward to discuss methods of anaesthesia You will be given a general anaesthetic where you will be asleep throughout the procedure, but may also have an epidural (spinal) anaesthetic (where a tube is placed in your back through which local anaesthetic and strong painkillers can be administered). If you are diabetic, care will be taken to monitor and control your blood sugars. This may require a needle in your arm with a special drip called a sliding scale.


Abdominal aorta
Graft
Blockage
Femoral artery

The operation

You will be taken to the anaesthetic room where your details will be checked. You will have heart monitoring stickers placed on your chest, so the anaesthetist can monitor your heart during the operation. You will have a tube into your bladder (a catheter) and sometimes a tube into your stomach via your nose (an NG tube) to stop you feeling sick. You will have fluids through a drip in your arm and may also have a line inserted into your neck and/or artery in your wrist for blood pressure monitoring. These will all be inserted after you are asleep.

The surgeon will make an incision on your abdomen and both groins. An artificial graft (a fabric tube) will be inserted to bypass the blockages. It will be sutured to the main artery in your abdomen (aorta) and the arteries in your groins which will bypass the blockage and bring more blood down to your legs.

The surgeon will close your wounds with either metal staples or non-removable stitches or dissolvable stitches. You may also have a drain (a fine tube which allows drainage of excess fluid) in your wound, which is usually removed 24-48 hours after surgery.

After the operation

After surgery you will be taken to the high dependency unit or intensive care unit for close monitoring- usually for 24-48 hours, but this will depend on your condition. Everyone recovers at a different rate.

The nurses will regularly monitor your blood pressure, pulse, temperature, respiratory rate and oxygen levels (observations). The colour, warmth, sensation, movement and pulses of your feet will also be regularly monitored. You will also be given oxygen via a face mask, if required.

It will be important to keep your lungs clear by way of intermittent deep breathing and attempts to cough up any secretions so as to

reduce the risk of chest infection. You may receive help from physiotherapists to achieve this.

Pain control

The anaesthetist will discuss with you the options for pain control, after your operation.

An epidural may be used during surgery to supplement a general anaesthetic and continued after the operation for pain control. The nerves to your lower back pass through an area close to your spine called the 'epidural space', the anaesthetist uses a needle to place a fine plastic tube (an epidural catheter) into the epidural space. Local anaesthetic and sometimes other pain relief medicine are put through this catheter to block the pain messages and relieve the pain.

Other pain relieving medicines e.g. morphine can be put into a pump called a patient controlled analgesia pump (PCA). The pump will be connected to a vein in your hand or arm and you will be able to press a button to deliver a pre-set dose of the pain relief medicine. As your condition improves the PCA or epidural will be removed and you will be given pain relief medicines in either tablet or liquid form. Every effort will be made to keep you as comfortable as possible following your operation.

What happens over the next few days?

You will be asked to stay in bed and rest immediately after surgery and overnight. Nurses will assist you with personal care needs. To prevent pressure ulcers, chest infections and deep vein thrombosis you will be advised to move regularly in bed and will be helped with this if required.

You will be reviewed by the duty vascular consultant or one of their team every day of your stay in hospital.

You will be given intravenous fluids for a few days after surgery to

keep you hydrated. Your digestive system will stop working for a while after surgery so we recommend that you do not eat for some time after the operation. You will be given intravenous fluids for a few days after surgery to keep you hydrated. Your doctors will advise you when to start eating, usually you will begin with fluids and progress onto solids. If you are diabetic we will closely monitor your blood sugars and restart your regular medication when you are eating normally.

The first day after your operation you will either be advised by your consultant to stay in bed and rest or you may be able to sit out in your chair with your legs elevated - this will depend on your condition. Over the next few days you will be encouraged to walk. If required a physiotherapist will assess your mobility, provide you with exercises and possibly offer you a walking aid if. Once you are mobile your catheter will be removed.

Depending on your condition you will be in hospital for approximately 5-7 days depending on your condition. If you feel you require help at home please ask the nursing staff.

Your wound

This will be carefully monitored and dressings will be removed and changed when necessary. The groin is an area where infection can easily occur and should be kept clean and dry at all times. The groin wound can leak a clear fluid called lymph which will require regular dressings, but this should settle with time.

If your wound is closed with staples or stitches which need removing this is usually done on day 8-10 after the operation. Your practice nurse or district nurse will remove your staples or stitches. As you return to normal activity you may find your wound causes you some discomfort for a few weeks. During the operation the surgeon will need to cut some small nerves near to the skin. This means you may experience some numbness around the wound, a burning or pins and needles sensation down the legs; this should settle in time but may not completely disappear. Your scar will fade after 6-12 months.

Your legs may be swollen after surgery. This is caused by fluid from the cells collecting under the skin and is a normal reaction to surgery. You should alternate between periods of gentle walking and rest with your legs elevated. Do not stand for long periods during the first month after the operation.

At home

You will feel tired for several weeks after the operation but as time goes by this should gradually improve.

You should be able to resume normal activities when you feel well enough. Regular exercise such as short walks combined with rest is recommended for the first few weeks. Avoid heavy lifting, strenuous activity or over stretching for 4-6 weeks.

Bathing: You may bath or shower as soon as your wound is dry, even if you have stitches or staples in.

Work: You may be able to return to work within 6 weeks of surgery depending on your condition and type of job. Please let the doctors know if you need a sick note prior to discharge.

Driving: You can drive when you can safely perform an emergency stop. This will usually be 6 weeks after surgery, but if in doubt check with your GP and your insurance policy.

Follow-up: You will be followed up in the vascular out-patients clinic, approximately 4-8 weeks after your operation, at your local hospital.

When to seek help

If you develop sudden pain, numbness, coldness or change of colour in the leg contact your GP or go to your local A&E department immediately as it could indicate that the bypass has blocked.

If you experience chest pains or difficulty breathing you should dial 999 immediately.

If you develop any sudden swelling and pain in your calf contact your GP or go to your local A&E department as this could indicate a deep vein thrombosis (DVT).

If you notice that your wound site is red, inflamed, very painful or discharging pus or fluid contact your GP immediately as you may require antibiotics.

If you have any worries or questions before admission or after discharge please do not hesitate to contact the vascular specialist nurses for advice.

This leaflet is intended as a guide. Everyone is different and recovery may vary from one person to the next.

Contact details

Should you require further advice or information please contact:

Vascular Specialist Nurses:

Preston/ Chorley site - 01772 523757 or via switch board on 01772 71655 and ask for bleep 4605 or 4606

Blackpool site: Via switch board 01253 300000 and ask them to contact the Vascular Specialist Nurse

Royal Lancaster hospital: Via switch board 01524 65944 and ask them to contact the Vascular Specialist Nurse

Furness General: Via switch board 01229 870870 and ask them to contact the Vascular Specialist Nurse

Vascular secretaries:

Preston/ Chorley/ Blackpool/ Lancaster/ Kendal /Furness General Hospital:

Via switch board: 01772 716565

Wigan Wrightington and Leigh:
01942 264057 01942 822068

Sources of further information

www.lancsteachinghospitals.nhs.uk
www.nhs.uk
www.patient.co.uk
www.accessable.co.uk

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Lancashire Teaching Hospitals is a smoke-free site.
On 31 May 2017 Lancashire Teaching Hospitals became a smoke-free organisation. From that date smoking is not permitted anywhere on any of our premises, either inside or outside the buildings. Our staff will ask you about your smoking status when you come to hospital and will offer you support and advice about stopping smoking including Nicotine Replacement Therapy to help manage your symptoms of withdrawal.

If you want to stop smoking you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

Cantonese:
如果你希望以另外一種格式接收該資訊，請和我們聯絡，不必猶豫。

Gujarati:
જો તમને આ માહિતી બીજી રચના કે ફોર્મેટમાં મેળવવાની ઈચ્છા હોય, તો કૃપા કરી અમારો સંપર્ક કરતા અચકાશો નહિ.

Hungarian:
Kérjük, vegye fel velünk a kapcsolatot, ha más formában kéri ezt az információt.

Polish:
Jeżeli chciał(a)by Pan/Pani otrzymać niniejsze informacje w innym formacie, prosimy o kontakt.

Punjabi:
ਜੇ ਤੁਸੀਂ ਕਿਸੇ ਹੋਰ ਫਾਰਮੈਟ ਵਿਚ ਇਹ ਜਾਣਕਾਰੀ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰਨ ਤੋਂ ਨਾ ਝਿਜਕੋ।

Urdu:
اگر آپ اس معلومات کو کسی اور صورت میں حاصل کرنا چاہتے ہیں تو برائے مہربانی ہم سے رابطہ کرنے میں ہچکچاہٹ محسوس نہ کریں۔

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Division: Surgery
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