Crossover Bypass Graft Surgery
Vascular Surgery
Patient Information Leaflet
**Crossover Bypass Graft Surgery**

**Information for patients from the Vascular Surgery Service**

This leaflet tells you about the operation known as crossover graft; it explains what is involved before, during and after the operation. It also explains what the possible risks are and how you can make your operation a success.

We would particularly ask you to read the sections headed 'Is the treatment safe', 'What do I do if I feel unwell at home?' and 'What should I do before I come into hospital'. This leaflet is not meant to replace the information discussed between you and your doctor, but can act as the starting point for such a discussion or as a useful reminder of the key points.

**Why do I need the operation?**

Because you have a blockage or narrowing of the arteries supplying your legs, the circulation of blood to your legs is reduced. This becomes particularly noticeable when your muscles require more blood during walking and causes pain. Any further fall in the flow of blood may lead to constant pain with the risks of ulcers or gangrene developing.

This operation is to bypass the blocked arteries in the leg so that the blood supply is improved.
What is a crossover bypass graft?

This is the insertion of a synthetic graft from an artery in one leg to an artery in the other leg. The graft is put through incisions in each groin and is buried beneath the skin in the lower abdomen (tummy).

How will this operation help?

The aim is to improve the blood supply to your legs and to relieve your symptoms. By doing this it is hoped to increase the distance that you walk before experiencing a feeling of cramp to the muscles of your legs and to prevent and save a foot from progressive ulcers, gangrene or amputation.

Useful information

www.nice.org.uk  
www.bvf.org.uk  
www.circulationfoundation.org.uk  
www.vascularsociety.org.uk

Access to benefits

If you require information about benefits information can be found on: www.direct.gov.uk, www.dwp.gov.uk or your local Benefits Office.

Your comments

Patient Advice and Liaison Service (PALS) Freephone 0800 073 0510.

PALS is here to support patients, relatives or carers when they have concerns or queries. They will do their best to resolve any concerns you may have and can also give advice on making a formal complaint.
Are there alternatives?

The blood supply to your leg has become compromised and needs to be corrected to maintain the health of your leg and help you walk more comfortably.

You could carry on as you are or have the leg amputated. The types of cross over graft operations are: femorofemoral, ileofemoral or axilofemoral the type of procedure carried out will depend on the extent and position of the occlusion (blockage) in your leg and your surgeon feels that this is the best option.

Is the treatment safe?

Although this is a major operation, more than 19 out of 20 people will survive this type of surgery. The risk to you as an individual will depend on:

- Your age
- Your general fitness, and
- Whether you have any medical problems (especially heart disease).

As with any major operation such as this, there is a risk of you having medical complications such as:

- Deep vein thrombosis (blood clots in the leg veins)
- Heart attack (one in 20)

Where can I get more information?

Further information can be obtained from your consultant's secretary or the vascular nurse specialist on the following numbers:

Mr Jayatunga, Consultant Vascular surgeon.
Secretary, Alison Slater
Tel no - 01384 244243

Mr Patel, Consultant Vascular surgeon.
Secretary, Joanne Webb
Tel no - 01384 244021

Mrs Shiralkar, Consultant Vascular surgeon.
Secretary, Faye Langford
Tel no - 01384 244246

Mr Pathak, Consultant Vascular surgeon.
Secretary, Maxine Winmill
Tel no - 01384 244245

Mr Rehman, Consultant Vascular surgeon.
Secretary, Lara Golding
Tel no - 01384 244176

Joy Lewis, Vascular Nurse Specialist
Tel no - 01384 456111
What do I do if I feel unwell at home?

In general call your GP or the out of hours doctors service. If you develop sudden pain or numbness in the leg that does not get better within a few hours then contact the hospital immediately.

Likewise if you experience any pain or swelling in your calves, any shortness of breath or pains in your chest, you must seek immediate medical attention.

Will I have to come back to hospital?

The vascular team may review you six weeks after discharge in outpatients to observe your progress, this is not always necessary if you are completely well. You can contact the vascular team if you have a problem.

Finally

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you.

Make sure you are satisfied that you have received enough information about the procedure, before you sign the consent form.

What complications may occur?

- Stroke
- Kidney failure (one in 40)
- Chest problems
- The loss of circulation to the legs or bowel
- Infection in the artificial artery

Each of these is rare, but overall it does mean that some patients may have a fatal complication from their operation. For most the risk is about 5%, in other words 95 in every 100 patients will make a full recovery from the operation.

The doctors and nurses will try to prevent these complications and to deal with them rapidly if they occur.

The important complications that you should have discussed with your consultant are:

- Infection of the artificial artery, this is rare (about one in 500) but is a serious complication, and usually treatment involves removal of the graft. To try to prevent this happening you are given antibiotics during your operation.
- Bleeding.
- Blockage of the bypass graft, this is a specific complication of this operation where the blood clots within the bypass graft causing it to block. If this occurs it will be necessary to perform another operation to clear the bypass.
Limb loss (amputation), very occasionally when the bypass blocks, and the circulation cannot be restored, the circulation to the foot is so badly affected that amputation is required.

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

Discomfort from the wound area is normal for several weeks after the operation. You may have patches of numbness around the wound or lower down the leg which is due to the cutting of nerves to the skin.

The wound can sometimes become infected and this is usually treated with antibiotics. The groin wounds can swell with fluid called lymph that may charge between the stitches but this usually settles down with time. It is quite common for the foot to swell due to the improved blood supply, raising of the leg when sitting will help to disperse.

**Before your operation**

If you are not already in hospital, you will be asked to attend a pre-admission clinic about a week before your operation, in order to allow time for tests required to make sure you are fit for the operation. These will include: blood tests, ECG (heart tracing) and a chest x-ray, and an x-ray of the arteries (angiogram) to find out where the blockages will be performed if it has not already been done. It is important to prepare well for the operation.

If your stitches or clips are the types that need removing, and this is not done whilst you are still in hospital, the GP practice or district nurse will remove them and check your wound.

You will feel tired for many weeks after the operation but this should gradually improve as time goes by. Regular exercise such as a short walk combined with rest is recommended for the first few weeks following surgery, followed by a gradual return to your normal activity.

Driving - You will be safe to drive when you are able to perform an emergency stop. This will normally be at least 4 weeks after surgery, but if in doubt check with your own doctor.

Bathing - Once your wound is dry you will be able to bathe or shower as normal.

Work - You should be able to return to work within 1 - 3 months following your operation. If in doubt please ask your doctor.

You will usually be sent home on a small dose of Aspirin if you were not already taking it, this is to make the blood less sticky. If you are unable to tolerate Aspirin an alternative drug may be prescribed.
As a safety measure you will receive injections of a blood thinning substance to prevent blood clots from forming. When sitting out in a chair you will be encouraged to elevate your legs.

When lying in bed or sitting out it is advisable to continue leg and deep breathing exercises taught to you by the physiotherapist. The wound is usually closed with stitches or clips that are removed 7-10 days after the operation or dissolvable buried sutures that do not need to be removed. You can be discharged with the staples in place and arrangements are made for their removal with either the district nurse or at your doctor’s surgery. You will be advised as necessary.

It is quite common to feel a bit low after having an operation; this can be caused by a number of factors such as pain, feeling tired and not sleeping well. The nurses can help you with this; please do not hesitate to let them know how you are feeling. It may be as simple as changing your painkillers or having a light-sleeping tablet that will make you feel better.

**Going Home**

The timing of your discharge varies from patient to patient depending on their walking ability. Usually your hospital stay is 7 - 14 days. If dissolvable stitches have been used, these do not need to be removed.

Smoking - if you smoke, you must try hard to give up before your operation. The longer you can give up for the better. Continued smoking will cause further damage to your arteries and your graft is more likely to stop working, and you are more likely to have complications from your operation.
- If you can stop smoking for a day or two your blood cells can carry more oxygen around your body.
- If you can stop smoking six weeks before you come into hospital you are less likely to get a chest infection.

Gum - Please note any patients about to undergo an operative procedure must not chew gum/nicotine gum prior to surgery.

Alcohol - if you are used to drinking a lot of alcohol, it is helpful to reduce the amount that you drink. Alcohol can reduce the function of your heart and it may also cause mild dehydration.

Losing weight - if you are overweight, some of the risks of the anaesthetic and the operation are increased. Losing weight will reduce these risks. You should consider a change to your diet by reducing the amount of fat that you eat. If you require any advice about this an appointment can be made to see the hospital dietician.

Exercise - regular exercise will increase your strength and fitness. There is no need to push yourself - a regular walk at your own pace will boost your stamina.
Coming into hospital

If you are not already in hospital you will usually be admitted on the day of surgery or one day before. Please bring with you all the medications that you are currently taking.

If you have any questions regarding the operation please ask the doctors. On the morning of the operation you will be asked not to eat or drink for a minimum of six hours before surgery. You will have a bath or a shower and will be given a theatre gown to wear.

The anaesthetic

You will be taken initially to the anaesthetic room where you will be given your anaesthetic, and from there into the theatre. You will either be put to sleep (a general anaesthetic) or you will have a tube inserted into your back through which painkillers can be given to numb the lower half of your body (epidural).

Sometimes you will have this as well as the general anaesthetic to provide pain relief after your surgery. Whilst you are asleep a tube may be inserted into your bladder to drain your urine. You will also have one inserted into a vein in your arm or neck (or both) for blood pressure measurements and administration of fluid following surgery.

After the operation

You will wake up in the recovery area of the theatre and will return to the high dependency unit once you are awake enough and are free of pain. You will have a drip (tube) into one of the veins in your arm, which is used to give you fluids, until you are able to eat and drink normally. You will have a tube in your bladder, with a bag on the end of it to collect urine (catheter). This is removed once the epidural is removed and you are more mobile and able to move around more easily.

You will experience varying degrees of pain but you will receive regular pain killers to help make you feel more comfortable. Please alert the staff when you have pain. The anaesthetist will discuss alternative ways in which pain relief can be administered. One way is in the form of patient controlled analgesia. This is by a machine that you are able to control yourself by pressing a button to aid pain relief. You may also experience some sickness. Once again please alert the nursing staff and they can give you an injection to stop this.

The position of the groin wounds will make moving uncomfortable at first. You will be encouraged to get up on the first day after your operation for a short while. The nurses and physiotherapists will assist you with this. You will progress to walking after 48 hours following your operation. This will encourage blood flow and aid healing of your wound and prevent complications in recovery.