

# Aorto-bi femoral and axillo-bifemoral bypass surgery

# Introduction

This leaflet gives you information about having an operation to bypass a narrowing or blockage in a blood vessel in your abdomen (belly). This information answers some of the commonly asked questions about hospital admission, the operation and discharge home.

# Why do I need this operation?

If you have been recommended for a Aorto-bifemoral Bypass or Axillo-bifemoral Bypass, it means that you have been diagnosed with peripheral arterial disease (PAD) and you have significant narrowing of the circulation to the legs located in the main arteries in your abdomen.

# What are the symptoms of peripheral arterial disease?

In the legs the usual symptoms are of muscle ache when you exercise, known as intermittent claudication, which gets better on resting.

Some patients with more severe disease may get a constant icy burning severe pain in their feet, especially at night which may keep them awake, this is known as rest pain.

In the most severe cases, patients may develop skin ulcers or black toes due to the restriction of blood flow.

After a dye test (arteriogram) to show the extent of disease, an operation to improve the blood flow to the legs may be appropriate.

Reference No. **GHPI1802 09 23** 

Department

Vascular

Review due

September 2026



# What causes PAD?

Arterial disease can be caused by smoking, high cholesterol, obesity, lack of exercise and family history.

# Which operation will be performed?

#### **Aorto-bifemoral Bypass**

This operation is where an artificial graft (tube) in the shape of a pair of trousers is sewn into the existing blood vessels to bypass the blockage. This involves a cut (incision) in the abdomen and in the groins to reach the arteries. The graft is then sewn into the blood vessels to connect them and restore blood flow to the legs.

This surgery may not be suitable for all patients.

Before the operation you will have some preoperative tests. If the results of these tests suggest that you are at particularly high risk, either from the anaesthetic or surgery due to lung or heart problems, then an alternative operation known as axillobifemoral bypass may be considered.

#### **Axillo-bifemoral Bypass**

This operation links your axillary artery in your shoulder to your femoral arteries in your legs using an artificial graft (tube). This will improve the blood supply to your legs.

The stress of this operation on the heart is less, as it avoids opening the abdomen but the graft is more prone to complications such as blockage and infection. This is because it is narrower and not well buried in the tissues.

Your surgeon will discuss the risks of the operation with you. We would advise taking someone to the clinic with you, to help remember what has been said.



## Benefits of the operation

- To improve the circulation in your legs.
- To prevent your symptoms from becoming worse.
- To improve any symptoms that you currently have such as pain or ulceration.
- To allow the safe removal of any gangrene that may be present on your foot.

# About the operation

The aim of the operation is to bypass the narrowing or blockage so the blood flow to your leg(s) is improved.

The operation will be performed using a general anaesthetic. A general anaesthetic will mean that you are asleep for the whole operation.

An epidural anaesthetic may also be given for pain relief. This involves an injection into your back (after numbing the skin with local anaesthetic) and will have the effect of numbing the lower part of your body during the operation.

Your anaesthetist and surgeon will discuss the type of surgery and anaesthetic with you, based on your general fitness and any other medical problems you may have.

# **Risks and complications**

Surgery is performed only with your consent. If you decide against surgery the symptoms in your leg could continue to deteriorate and you may be at risk of losing your leg. There is also a risk of widespread infection (sepsis) and failure of your major organs which is life threatening.

As with all major surgery there is a risk of you not surviving the operation. National figures quote that there is a risk of this happening to around 5 in every 100 patients. This is dependent on your overall fitness and will be discussed with you before the surgery.



#### Other risks of the operation include:

#### Patient Information

- Having a heart attack.Chest, wound or graft infection.
- Deep Vein Thrombosis (DVT), Pulmonary Embolism (PE) (clot in your leg or lung). To prevent clots forming you will be given daily injections of a medication to thin the blood.
- The graft may become blocked. If this happens, further surgery may be necessary and includes the possibility of limb loss (amputation).
- Areas of numbness or altered sensation around the wounds and in the area over the graft. This usually improves but can be permanent but will not affect the strength or mobility of your leg.
- Swelling of the leg. This is usually temporary but can take several months to fully recover.
- Reduced blood supply to the bowel.
- The operation may have an impact on your sex life.

Please discuss any concerns you may have with your surgeon.

### What to expect

You will be admitted to hospital usually on the day of your operation. You can expect to be in hospital for 5 to 10 days.

Following your operation, you will be monitored in the recovery area of the operating theatre department.

It is usually necessary for patients to be transferred to the High Dependency Unit (HDU) overnight for further monitoring after their operation. It is important that your relatives and friends are aware that this can be part of the normal procedure.

# **Pain control**

You will have some pain and discomfort after your operation. You will be given strong pain relief, either injections or tablets, to control this.

If deemed appropriate by the anaesthetist, pain relief may be given through an epidural as explained earlier in the leaflet.

You will be monitored closely to make sure that your pain is controlled.



## Bowel movements and passing urine

A catheter tube will be passed into your bladder during the operation to drain away the urine. This will be removed when you are mobile and able to walk to the toilet.

You are unlikely to have your bowels open for the first few days after the operation. Once they begin working again you may have diarrhoea. This usually settles within 24 hours.

# Wound care

You may have a wound drain inserted while you are in the operating theatre, this is normally removed the day after your operation. Dissolvable stitches or small metal skin clips are normally used to close your wounds. If skin clips are used these will be removed 10 days after your operation by the district or practice nurse, the ward will arrange this for you.

You will be able to shower normally before you go home.

# **Going home**

Once you are mobile and eating and drinking normally, arrangements will be made for you to go home.

At home, it is important that you have periods of rest and gradually build up your normal activities each day.

It is advisable when you are resting that you raise your leg on a stool or settee and avoid long periods with your leg down. This will help to reduce any swelling.

Some pain relief medication can cause constipation so a diet high in bran, fresh fruit and vegetables is advisable. It is also advisable to drink plenty of water each day. If constipation becomes a problem, please contact your GP as you may need a mild laxative.

Recovery can take several months, and you may feel very tired for weeks or months after your operation.

You can begin driving again once you can perform an emergency stop comfortably and without hesitation. It is advised that you inform your car insurance company that you have had an operation.



### **Following surgery**

You will be seen in the outpatient clinic about 4 to 6 weeks after your discharge. You should receive the appointment in the post

# **Graft monitoring**

An artificial graft has been used so your surgeon may request that it is monitored. This is sometimes done using an ultra sound scan, if needed you will receive an appointment in the post

# **Contact information**

If you have any concerns before being seen in the follow-up clinic, please contact your GP or NHS 111 for advice.

#### NHS 111 Tel: 111

#### Vascular Ward

2A Gloucester Royal Hospital Tel: 0300 4226776

# **Further information**

For more information about Aortobifemoral and Axillobifemoral Bypass, please visit the follow website.

#### **Circulation Foundation**

www.circulationfoundation.org.uk/help-advice/peripheralarterial-disease/aortobifemoral-and-axillobifemoral-bypass

Content reviewed: September 2023



# Making a choice

# **Shared Decision Making**

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.

# Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

- 1. What are my options?
- 2. What are the pros and cons of each option for me?
- 3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation \* Ak 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A Potent Education and Convention, 201134: 378-85

AQUA https://aqua.nhs.uk/resources/shared-decision-making-case-studies/