Having an angioplasty

Information for patients
This sheet answers common questions about having an angioplasty. If you would like further information, or have any particular worries, please do not hesitate to ask your nurse or doctor.

In all cases, a doctor will explain the angioplasty to you and answer any questions you may have.

**What is an angioplasty?**
Angioplasty is a medical procedure performed to improve the flow of blood through narrowed or blocked arteries. Narrowed or blocked arteries can lead to symptoms such as:
- painful or numb limbs
- formation of ulcers and infection
- non-healing ulcers requiring amputation (gangrene)
- problems with the function of organs supplied by the artery (for example kidney problems).

By treating the narrowing in the artery and improving the flow of blood, these symptoms can be improved. In patients with limb disease, the aim is to prevent the need for amputation or to improve the ability of a wound to heal if an amputation is planned.

**How is angioplasty performed?**
A specially trained doctor called an interventional radiologist will perform the procedure. They have particular expertise in performing procedures under image guidance.

Angioplasty is normally performed using local anaesthetic and sedation administered through a small needle in your arm. Sedation medication is used to help relieve anxiety.

A needle will be inserted into the artery, usually in the groin. An angiogram (pictures of the arteries) will be performed using a contrast medium (x-ray dye) to give a clear picture of the arteries. A balloon will then be used to open any narrowed sections of
artery. Sometimes a metal tube known as a stent will be used to help keep the artery open.

**The benefits of having an angioplasty**

- Angioplasty is effective in helping to heal ulcers which have formed on the lower limbs due to blockages in the artery.
- It can prevent or delay amputations.
- It can improve blood flow so that there is an improvement in the severity of pain in the limb.
- Angioplasty can also improve the function of organs supplied by narrowed arteries.

The combination of these benefits should lead to an improved quality of life in people with arterial blockages.

**Risks and side-effects**

- Angioplasty is a safe medical procedure, but some risks and complications can arise:

  - It is normal to have some pain at the site where the needle is inserted into the artery once the local anaesthetic has worn off. This should not require any treatment but you may take over the counter painkillers to help with the pain.

  - There is a less than 1% chance that the procedure can result in damage to the artery. Should this occur steps will be taken to try to fix the damaged artery. If this is not successful then surgery may be required, but this is very rare.

  - Eventually some patients suffer repeat narrowing of the artery. The risk of this can be reduced by medical treatments and making lifestyle changes – this should be discussed with your doctor. Some people may need a repeat angioplasty if symptoms recur.
The x-ray dye (contrast medium) used can result in temporary damage to the kidneys. The amount used is limited as much as possible. Should you have pre-existing kidney disease, an alternative type of dye may be used.

Swelling and bruising in the groin is common for a few days afterwards. Increasing or painful swelling can indicate a more serious problem – if you are concerned, attend your nearest emergency department.

Alternatives to having an angioplasty
An angioplasty will have been recommended following discussion between your doctor, surgeon and a radiologist. In some people with limb ischaemia a bypass operation is the preferred treatment, but this depends on the location and extent of narrowing in the artery.

Before your procedure
You will need to have a blood test about a week before the procedure. This test lets us check that your blood clotting is normal. If it is abnormal there is an increased risk of bleeding after the procedure. You may be given special blood transfusions to correct this. Please discuss any concerns you have with your doctor.

If you are taking warfarin or any other blood thinning medication, please call the interventional radiology department at the Royal Free Hospital on 020 7433 8772 for further advice.

If you have any allergies or have previously had a reaction to the x-ray dye (contrast) you must tell the radiology staff before you have the test.
• **For morning admissions, please do not eat or drink anything from midnight** – you can drink water for up to two hours before the procedure.

• **For afternoon admissions, you may eat a light breakfast but please do not eat anything after 6am** – you can drink water for up to two hours before the procedure.

Take your medicines as normal, with a sip of water, unless your doctor or nurse tells you not to.

**What will happen on the day?**
The procedure will take place within the interventional radiology department at the Royal Free Hospital and normally takes between 45 minutes and two hours.

You will be asked to give written consent before the procedure. We want to involve you in decisions about your care and treatment – please do not hesitate to ask the doctor if you have any questions at all. It is your decision to have the procedure.

You will be shown to a private cubicle where you will be asked to change into a hospital gown.

A small plastic tube (cannula) will be placed into a vein in your arm. This is so that we can give you a sedative during the procedure should you need it.

You will need to lie on the x-ray table, generally flat on your back. You may have monitoring devices attached to your chest and finger and may be given oxygen. You will receive an injection of local anaesthetic around the groin which will sting for a few seconds, and an injection of blood thinning medication to prevent blood clots.

A plastic tube (sheath) will be positioned inside the artery in the
groin and a balloon is used to treat the narrowing. As x-ray dye is injected during the procedure, it is normal to feel warm and this will not last long.

At the end of the procedure the plastic tube positioned in your groin will be removed and the doctor will apply pressure to the area to help heal the hole in the artery. It is important that you lie flat and completely still – please listen carefully to the doctors instructions to reduce the risk of bleeding.

If your procedure is rescheduled, any medication that had been stopped should be restarted until your doctor or nurse advises you otherwise.

**After your angioplasty**
You will be taken to a ward where the nursing staff will monitor you. You will have to lie flat for four hours and stay in bed for six hours.

If there is no evidence of bleeding or infection you can usually leave the hospital that evening. If you have sedation during the procedure, or your procedure is performed late in the day, you will need to stay overnight.

You may feel sore or bruised for a few days.

**What you should do when you get home**
When you get home you should:
- Rest for a minimum of 24 hours and if possible do not go to work on the day after the procedure.
- It is recommended that someone stays with you overnight, particularly if you had sedation.
- You should eat and drink as normal.
- Continue with your normal medication as prescribed, and pain relief if necessary. If you take anticoagulants,
restarting these will be discussed with you before you are discharged.

When you will receive your results
The success of the procedure will be discussed with you at the time.

What to do if you have a problem at home
If you have swelling, pain or are concerned please go to your nearest emergency department.

Parking
Please be aware that a very limited number of parking spaces are available at the hospital. Please visit the Royal Free London website for further information at: royalfree.nhs.uk/contact-us/parking-at-our-hospitals

Further information
For more information about the radiology service at the Royal Free London, visit our website: www.royalfree.nhs.uk/services/services-a-z/radiology/
If you have any feedback on this leaflet or require a full list of references for it, please email: rf.communications@nhs.net

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please speak to a member of staff.

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