Mr Andrew Gordon MS FRCS The Bridge Clinic Oldfield Lodge Bridge Road Maidenhead Berks SL6 8DG

Telephone 01628 780200 Email: ag@andrewcgordon.co.uk

ANGIOPLASTY (Peripheral Vascular Disease) Information Sheet

What is an angioplasty?

An angioplasty is a way of relieving a blockage in an artery, without having an operation. A fine plastic tube called a catheter is inserted through a blockage in an artery and a special balloon on the catheter is then inflated, to open up the blockage and allow more blood to flow through it.

Why do I need an angioplasty?

Your doctors know that there is a problem with part of your circulation. You may already have had a duplex scan, angiogram or a magnetic resonance scan (MRA), which has shown a blockage in an artery. While this might need treatment by surgery, in your case it has been decided that an angioplasty is the best way of proceeding.

Who will be doing the angioplasty?

A specially trained doctor called a radiologist. Radiologists have special expertise in using x-ray equipment and also in interpreting the images produced. They need to look at these images while carrying out the procedure.

Where will the procedure take place?

Generally in the x-ray department, in a special "screening" room, which is adapted for specialised procedures.

How do I prepare for an angioplasty?

You need to be an in-patient in the hospital. You may eat and drink normally. You may receive a sedative to relieve anxiety. You will be asked to put on a hospital gown. As the procedure is generally carried out using the big artery in the groin, you may be asked to shave the skin around this area.

If you have any allergies or take a drug called WARFARIN or METFORMIN, you <u>must</u> let your doctor know. If you have previously reacted to intravenous contrast medium, the dye used for kidney x-rays and CT scanning, then you must also tell your doctor about this.

What actually happens during an angioplasty?

The procedure starts off in exactly the same way as an angiogram and if you have already had this performed, you will know what to expect. If you have not, you will need to read leaflet "Information for patients undergoing an angiogram".

You will lie on the x-ray table, generally flat on your back. You need to have a needle put into a vein in your arm so that the radiologist can give you a sedative or painkillers. Once in place, this will not cause any pain. You may also have a monitoring device attached to your chest and finger and may be given oxygen through small tubes in your nose.

The radiologist will keep everything as sterile as possible and will wear a theatre gown and operating gloves. The skin near the point of insertion, probably the groin, will be cleaned with antiseptic and then most of the rest of your body covered with a theatre towel.

The skin and deeper tissues over the artery will be anaesthetised with local anaesthetic and then a needle will be inserted into the artery. Once the radiologist is satisfied that this is correctly positioned, a guide wire is placed through the needle and into the artery. Then the needle is withdrawn allowing the fine plastic tube (catheter) to be placed over the wire and into the artery.

The radiologist will use the x-ray equipment to make sure that the catheter and the wire are moved into the right position, very close to the blockage in the artery. Then the wire and the catheter will be moved so that they pass into the narrowed area, and the balloon is then inflated. This may need to be done several times in order for the narrowed area to open up sufficiently to improve the blood flow.

The radiologist will check progress by injecting contrast medium down the catheter to show how much the narrowed artery has opened up. When he or she is satisfied that a good result has been obtained, the balloon is deflated and the catheter is removed. The radiologist will then press firmly on the skin entry point for several minutes, to prevent any bleeding.

Will it hurt?

When the local anaesthetic is injected it will sting to start with, but this soon wears off and the skin and deeper tissues should then feel numb. After this, the procedure should not be painful. There will be a nurse or another member of clinical staff standing next to you and looking after you. If the procedure does become uncomfortable for you, then they will be able to arrange for you to have some painkillers through the needle in your arm.

As the dye or contrast medium passes around your body, you may get a warm feeling which some people can find a little unpleasant. However, this soon passes off and should not concern you.

How long will it take?

Every patient's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. Some angioplasties take about half an hour. Other

angioplasties may be more involved and take rather longer, perhaps over an hour. As a guide, expect to be in the x-ray department for about an hour and a half altogether.

What happens afterwards?

You will be taken back to your ward on a trolley. Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no problems. They will also look at the skin entry point to make sure there is no bleeding from it. You will generally stay in bed for a few hours until you have recovered. You may be allowed home on the same day or kept in hospital overnight.

Are there any risks or complications?

Angioplasty is a very safe procedure, but there are some risks and complications that can arise. There may occasionally be a small bruise called a haematoma, around the site where the needle has been inserted and this is quite normal. If this becomes a large bruise, then there is the risk of it getting infected and this would then require treatment with antibiotics. Very rarely, some damage can be caused to the artery by the catheter or the balloon and this may need to be treated by surgery or another radiological procedure.

Sometimes it is not possible to manoeuvre the wire through the blockage and occasionally despite inflating the balloon several times, the narrowing is so severe that it does not open up as much as anticipated. The radiologist who is doing the procedure may be able to tell you if there are likely to be problems like this, for example, if the blockage is very long or difficult to get to. If the angioplasty is unsuccessful, then it may be necessary to have surgery to relieve the blockage.

Despite these possible complications, the procedure is normally very safe and is carried out with no significant side effects at all.

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.**

Angioplasty is considered a very safe procedure, designed to improve your medical condition and save you having a larger operation. There are some slight risks and possible complications involved and although it is difficult to say exactly how often these occur, they are generally minor and do not happen very often.

This leaflet has been prepared by the British Society of Interventional Radiology (BSIR) and the Clinical Radiology Patients' Liaison Group (CRPLG) of the Royal College of Radiologists and amended by Wexham Park Radiology Department.