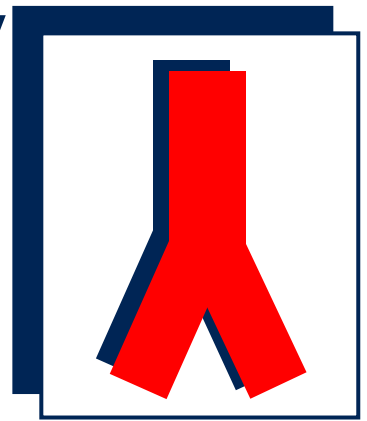


Will Butcher – Vascular Surgery

Patient information

Information to help you understand Angioplasties and Stents



What is an angiogram?

Arteries are blood vessels that carry oxygenated blood to your muscles. An angiogram is a test where by injecting dye into the arteries and using an xRay, we can see what is wrong with an artery or to plan for an operation on the artery. Sometimes during an angiogram it is possible to see that the problem may be overcome by stretching the narrowed segment with a special balloon. This is called an angioplasty, and usually will be done at the same time as the angiogram. A stent is a fine wire mesh tube that is used to hold open a vessel that has been treated with an angioplasty. Not all patients will need a stent. Because this is an invasive investigation most people will be admitted to hospital for it, many though will go home on the same day.

What preparation is necessary?

You may have already had a scan of the arteries but if not one may be required. We may also ask for a heart test (ECG) and blood tests as part of the preparation.

What happens when I first come into hospital?

Patients who are not already in hospital are usually admitted on the day of their surgery. When you arrive, the Medical team check that everything is ready. One or two last blood tests may be done. We will ask you to sign a consent form or confirm your consent if you have already signed. If you have any last questions you should bring them up with a member of the team.

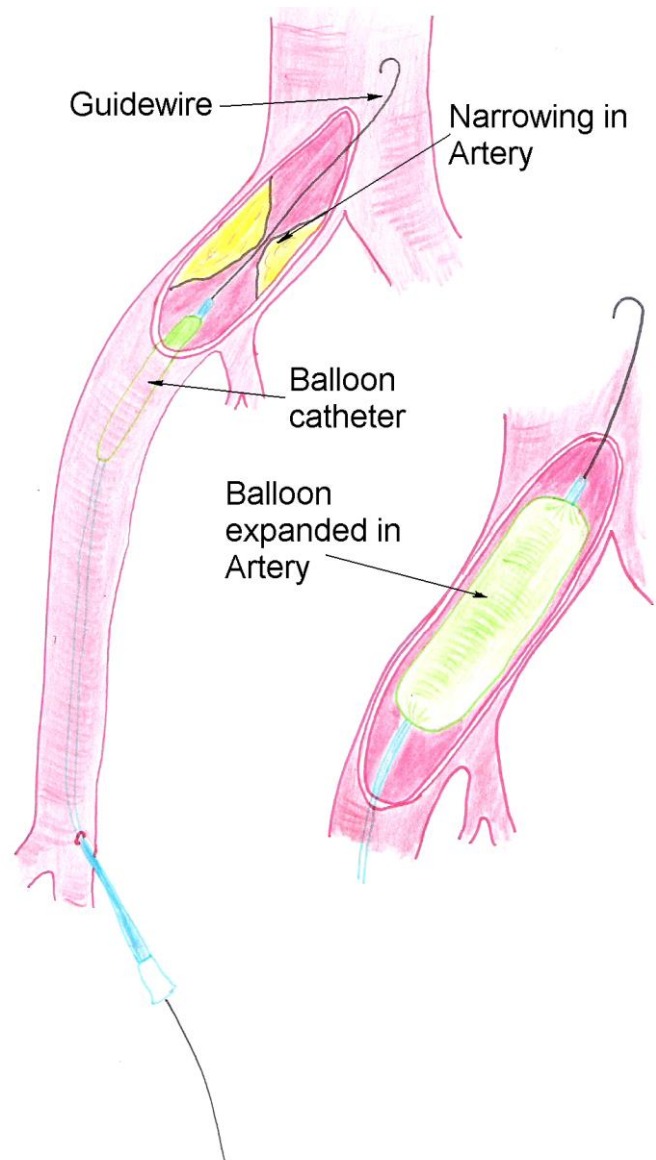
What should I bring with me?

You should bring all your current medication with you. It is sensible to bring a small bag of toiletries and a pair of comfortable pyjamas. Try and avoid bringing anything too valuable or precious with you as things can go missing in hospital.

Will I need any preparation for the test?

To help you overcome any feelings of sickness we ask that you do not eat during the 6 hours leading up to the test. We will give you a hospital gown to change into, and some of the hair in your groins will also need to be shaved. A needle may be put into a vein in your arm or hand so that fluid or medication can be administered intravenously. If you have a man made heart valve or arterial graft antibiotics may be required.

What does the test involve?



Angiograms and angioplasties are done in a specialised area of the operating theatre complex. We will ask you to lie flat, but you may have a pillow under your head if you wish. Your surgeon or radiologist (xRay doctor) or one of their assistants (radiographer) will clean the skin in your groin with an antiseptic and cover your legs and tummy with sterile towels. He or she will then inject some local anaesthetic in the skin of your groin. This may sting. Once the anaesthetic has started to work the doctor will use a needle to puncture the artery in your groin. The needle will sometimes be placed on the same side as the problem in your leg and sometimes on the other side. The dye is injected through this needle, and the big xRay machine is used to show up any problems with the arteries. It is normal for you to feel a warm feeling in your leg when the dye is injected. The doctor will usually ask you to stay very still at this point so that the x-ray pictures are as clear as possible.

What happens next?

After taking the x-rays it may be obvious that an angioplasty would help you. During angioplasty a fine tube with a balloon on the end is passed down your artery over a special guide wire and the site of the blockage or narrowing the balloon is inflated to open up the artery. Some times this is all that is required, however, if the result is not perfect a stent may be deployed to help keep the artery open. At the end of the angiogram or angioplasty the catheter is removed and the small puncture hole in the artery is closed with a special stitch or by pressure applied with the doctor's fingers.

What happens when I get back to the ward?

It is important that the puncture hole seals properly to prevent bleeding. For this reason we ask that you stay flat in bed for 4 hours after the procedure. Depending on your blood pressure and pulse (and blood sugar if you are diabetic) you should be able to eat and drink normally. The nursing staff on the ward will advise you.

Are there any complications?

The majority of angiograms and angioplasties pass without incident. However, there can be some problems.

What will happen?

You are likely to have some soreness and bruising in the groin. We will give you painkillers if you need them and the bruising will settle down in a few days.

Complications that may occur:

Uncommonly, the puncture site may bleed requiring an emergency operation to mend the artery. Sometimes this is only obvious several days or weeks later when the patient develops a lump or swelling in the groin. The risk of this is less than 1%.

Occasionally the angiogram or angioplasty may damage the narrowed or blocked artery further. It may be necessary to perform an emergency operation to fix this.

Rarely the puncture site may become red or infected and antibiotics may be needed.

Perhaps the most important thing you should know is that for some reason or another the procedure will quite simply not work. This may mean that a further angioplasty, stent or even surgery may be needed to solve the problem. If it fails, it may be that we will decide to simply leave well alone for now.

Very occasionally a patient will react to the dye. If you have a history of allergy to Xray dye you should let us know promptly.

Major complications like death or loss of a leg can occur but are very rare.

How long will I need to stay in hospital?

If all goes to plan and you are medically fit it is usual for you to go home the day of or the day after an angioplasty. If further surgery is required a longer admission may be required.

What happens when I get home?

It is important that you keep an eye on the puncture site and report any bleeding or excessive bruising to your doctor. You should try to get back slowly to your usual activities but you will obviously be limited for a few days by soreness in the groin. It is best to avoid strenuous work such as heavy lifting or digging for a week or so. You should be able to drive within a few days.

Will I have any follow up appointments?

You will usually be sent an appointment to see your consultant within 4-6 weeks or so to discuss your symptoms and the results of the test.

Once it's all over?

If you were previously a smoker you must make a sincere and determined effort to stop completely. Continued smoking will cause further damage to your arteries and your angioplasty or stent is more likely to stop working. General health measures such as reducing weight, a healthy diet and regular exercise are also important. We will ask you to take a low dose of aspirin every day to help to thin the blood. If you can not take aspirin, there are alternatives. You should also be taking a drug to reduce cholesterol (Statin). If not you should talk with your GP about this. We will generally see you back in the outpatients in 4-6 weeks.

More information

The first sensible step is to discuss your problem with your GP or surgeon, they will be best positioned to explain what to expect.

If you need more information you can go to one of these vascular organisation's websites:

The Australia and New Zealand Society for Vascular Surgery.

www.anzsvs.org.au/patientinformation/

The Vascular Surgical Society for Great Britain and Ireland.

www.vascularsociety.org.uk/patients/