

## Patient information

# Information about your angioplasty and stent insertion

If, for any reason, you cannot keep this appointment, please telephone 01284 713095 which is a direct line into the department. This will avoid undue delay and will help us to keep our waiting list as short as possible.

## What is angioplasty?

Angioplasty is a way of relieving a narrowing or blockage in an artery, without having an operation. A thin plastic tube (catheter) is inserted into the artery and passed through the blockage. A special balloon on the end of the catheter is placed across the narrowing or blockage. This balloon is inflated from outside the body momentarily and then deflated to improve the flow through the vessel.

## What is a stent?

A stent is a special device made of metal mesh that is placed across a narrowing or blockage to keep the artery open.

## Why do you need an angioplasty?

Your doctor has identified that there is a narrowing or blockage in one of your blood vessels that is causing you a problem. If the arteries in your legs are affected, this may be causing pain in your calf or thigh. This may occur after you have walked a

certain distance or may be causing more distressing symptoms such as severe pain in your foot, especially at night. Other tests such as a Doppler ultrasound scan, a computed tomography scan (CTA) or a magnetic resonance scan (MRA) may have already been performed.

## **Who will be doing the angioplasty?**

A specially trained team led by an interventional radiologist within the radiology department. Interventional radiologists have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

## **Where will the procedure take place?**

In the angiography suite located within the radiology department. This is similar to an operating theatre into which specialised X-ray equipment has been installed.

## **Are you required to make any special preparations?**

An angioplasty is usually carried out as a day case procedure under local anaesthetic. Before coming into hospital, you will have been asked about certain risk factors for vascular disease, unless you have come into hospital as an emergency. These factors include checking your kidney function and whether or not you are on treatment for diabetes or blood clots. Please use the enclosed blood test form to have a blood test either at your surgery or the hospital. Ideally this should be done before your angioplasty examination unless otherwise stated by the radiology nurses.

If you are taking warfarin, this will need to be stopped before the procedure and you may require alternative treatment. This should be arranged by your vascular consultant.

On the day of your procedure, please eat and drink as usual and take any prescribed medication unless we have specifically asked you to stop any medicine which 'thins' your blood such as anticoagulants/antiplatelet medication.

If you have any allergies or have previously had a reaction to the dye (contrast agent), you must tell the radiology staff before you have the procedure.

You must not drive on the day of your procedure so someone will need to drop you off and collect you after the procedure.

## **When you arrive**

Please check your appointment letter to see what time you should attend the specified ward/department. You will be asked to get undressed and put on a hospital gown. A small cannula (thin tube) may be placed into a vein in your arm.

## **What happens during an angioplasty?**

Before the angioplasty, the interventional radiologist will explain the procedure and ask you to sign a consent form. Please feel free to ask any questions that you may have and, remember that even at this stage, you can decide against going ahead with the procedure if you so wish. You will have a monitoring device attached to your arm, finger, and chest and may be given oxygen through small tubes in your nose. You will be asked to lie on the X-ray table, generally flat on your back. The X-ray machine will be positioned above you.

An angioplasty is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves to carry out the procedure. Your skin near the point of insertion, usually the groin, will be cleaned with antiseptic and you will be covered with sterile drapes.

The skin and deeper tissues over the blood vessel will be numbed with local anaesthetic. A needle followed by a wire and catheter (fine plastic tube) will be inserted into the artery and guided to the correct position to obtain the images required. Once the narrowing or blockage has been identified, a balloon is inflated to open up the artery and allow more blood to flow. Occasionally, the interventional radiologist will decide to place a stent (metal mesh) to keep the artery open. This is placed in exactly the same way as the balloon.

The radiologist will check it's progress by injecting contrast medium down the catheter to show how much the narrowed artery has opened up. **(Please ensure you read the 'Are there any risks or complications?' section of this leaflet.)** Once the interventional radiologist is satisfied with the images, the catheter will be removed. Firm pressure will be applied to the skin entry point, for about ten minutes, to prevent any bleeding. Sometimes a special device may be used to close the hole in the artery.

## **Will it hurt?**

It may sting a little when the local anaesthetic is injected. You may feel a warm sensation for a few seconds when the dye is injected and feel like you are passing urine. You may feel some discomfort also when the balloon is inflated.

## **How long will it take?**

Every patient is different, and it is not always easy to predict, however, expect to be in the radiology department for about an hour.

## **What happens afterwards?**

You will be taken back to the ward on your bed. Nursing staff will carry out routine observations including pulse and blood pressure and also check the skin entry point

to make sure there is no bleeding from it. You will generally stay in bed for 4 hours, until you have recovered. You may be allowed home on the same day or kept in hospital overnight, so please bring an overnight bag, and any medication you will need for the 24 hours that you may be at the hospital. Be sure to keep all your medication in your possession. If your procedure is carried out early in the morning you may be able to go home after 4 to 5 hours if there are no complications.

**You will need to have someone in your home with you overnight. Please inform the X-ray department if this is not possible.**

## **Are there any risks?**

Angioplasty is a very safe procedure, but as with any medical procedure there are some risks and complications that can arise. A small bruise (haematoma) around the site where the needle has been inserted can occur but this is quite normal. The bruise might be sore for a few days but will disappear in a few weeks. Rarely, a large bruise may develop and require a small operation to drain it. Occasionally, a tender pulsating swelling called a false aneurysm may develop over a few days due to ongoing leakage from the arterial puncture site. This usually can be treated by an injection of a blood-clotting agent under ultra-sound guidance.

Very rarely, some damage may be caused to the artery by the catheter or by displacement of the material causing a blockage in other arteries (an embolus). This may require a small operation or another procedure.

The dye (contrast agent) used during the procedure is very safe, but occasionally can cause damage to the kidneys. This occurs mainly in patients whose kidney function is abnormal already and this will be identified on the blood tests that are performed before the procedure.

The contrast agent is called Omnipaque 300 (Iohexol) or Visipaque 270 (Iodixanol). The purpose of the contrast agent is to show more detail of the anatomy during the procedure thus giving the doctors more information. As with all drugs there is a very

slight risk of side effects. We must stress that minor reactions are very rare with most patients only experiencing a hot flush and strange taste, which is normal.

- Minor reactions include sneezing, skin rashes, nausea.
- Major reactions include breathing difficulties and cardiac arrest.

**To help us to assess whether it will be appropriate to give you the injection, we need you to answer the following questions. If you answer yes to any of these questions, please phone us on 01284 713095.**

1. Have you ever had a reaction to an X-ray contrast agent (including Iodine)?
2. Do you have any allergies that have required hospital treatment?
3. Do you take the drug metformin?
4. Do you have severe asthma?
5. Do you have renal (kidney) function problems?
6. All patients aged 12-54 years; is there any possibility you could be pregnant?

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

## **Finally...**

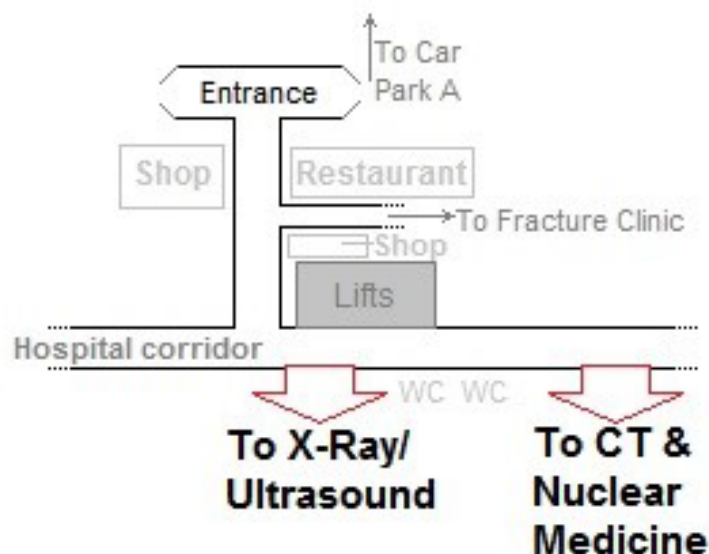
Some of your questions should have been answered by this leaflet but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure before you sign the consent form.

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**This leaflet has been prepared from guidance given by the British Society of Interventional Radiology (BSIR).**

[For the most up to date advice please visit the BSIR](#)

## Directions to X-ray and ultrasound department:



**Car parking for patients/visitors** is available in Car Park A at the front of the hospital (the first car park to the right as you enter the site), and Car Park D at the rear of the site near the MRI and Macmillan Units.

West Suffolk Hospital operates a number plate recognition system for all vehicles entering the site. When ready to leave, please visit one of the pay stations on site. Enter your vehicle registration number and pay the required fee. The exit barriers will recognise the vehicle registration and that the parking has been paid for and will open automatically.

Please check the hospital website ([www.wsh.nhs.uk](http://www.wsh.nhs.uk)) for further information on car parking, fees, exemptions, and penalties.

**Please allow plenty of time to park before your appointment, as the car parks are continuously busy throughout the day.**

**Please note:** The hospital is not responsible for any lost or stolen valuables. Please leave all jewellery at home, including body piercing ornaments and rings if possible. Wedding rings need not be removed.

**It is not advisable to bring children with you for this appointment as legally staff cannot look after them.**

## **X-rays and pregnancy**

Because of the potential risks to an unborn child, we need to know, for certain examinations, if there is any possibility of a patient being pregnant. All patients between the ages of 12 years and 54 years of age will be asked if there is the possibility of pregnancy. Discussion will be carried out in private and in confidence.

## **Ionising Radiation (Medical Exposure) Regulations 2017**

The Ionising Radiation (Medical Exposure) Regulations 2017 state that we must inform you of the use and risks of radiation. You are here for a study which uses X-rays to produce images of your body. The amount of radiation you will receive will depend on the type of procedure you are having. It has been deemed necessary for you to have this procedure as the results will be of benefit to you.

Please be assured that we always aim to keep radiation exposures as low as possible.

Below are some example doses for similar procedures:

<b>Diagnostic procedure</b>	<b>Typical effective dose (milliSieverts)</b>	<b>Equivalent amount of background radiation</b>
Barium Swallow	1.5	8 months
Hysterosalpingogram	0.3	1.6 months
Sialography	0.4	2.2 months
Barium follow through	1.2	6.7 months
Proctography	2.05	11.2 months

UK average background radiation = 2.2 mSv per year. This is the amount of radiation you would receive naturally living in the UK. If you have any questions, please speak to the radiographer carrying out your examination.



## **Data Protection information**

West Suffolk NHS Foundation Trust will manage your information in line with the General Data Protection Regulation 2016/679. The information you provide will be retained for the purposes of your healthcare. The information will be retained in line with the **NHS Records Management Code of Practice for Health & Social care**.

You have rights in relation to the way we process your information. If you no longer want us to use your information for the purposes specified above; if you want to request to have your information erased or rectified, please contact the information governance team on 01284 712781.

We will review all requests in relation to your rights under GDPR, along with our responsibilities for record keeping.

Images may be used for research purposes as well as teaching. Patients must inform a member of staff if they do not consent to this.

As part of a shared service agreement with other NHS organisations, your radiology images and records may be shared with these other organisations as part of determining and providing your care. If you would like to know more about the extent of this sharing, or you wish us not to share at all with another organisation, or have any other concerns about it, please contact a member of staff.

**If you would like any information regarding access to the West Suffolk Hospital and its facilities, please visit the website for AccessAble (formerly DisabledGo)**

<https://www.accessable.co.uk>



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