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To use the Text Relay service, prefix all numbers with 18001.

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اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براؤکرم اس فون نمبر 01932 723553 پر رابطہ کریں

Se precisa de uma tradução por favor contacte: 01932 723553

আপনার অনুবাদের দরকার হলে এখানে যোগাযোগ করুন : 01932 723553

यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

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Undergoing a Coronary Angiogram (Cardiac Catheterisation)

Advice for Patients and their Carers



Epsom and St. Helier **NHS**
University Hospitals
NHS Trust

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Advice and Liaison Service (PALS) on 01932 723553 or email pals@asph.nhs.uk. If you still remain concerned please contact our Complaints Manager on 01932 722612 or email complaints@asph.nhs.uk.

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Introduction - Information for Patients and Carers

This booklet has been designed for patients undergoing a coronary angiogram (also known as cardiac catheterisation) at St Peters Hospital NHS Trust and their carers to help you make an informed decision. You may be having the procedure as a day case or after being admitted to hospital for angina or a heart attack. It gives important information about the angiogram procedure, the benefits and risks to you, about going home and for getting back to normal afterwards.

Your doctor has recommended this procedure, however, it is your decision to go ahead with the procedure or not. InHealth is an independent service provider working in partnership with Ashford & St Peters NHS Trust and Epsom & St Helier University Hospitals to provide a high quality service for the local community.

If after reading this leaflet, you have any further questions regarding this booklet or your procedure please call one of the following:

- The Angiography Suite - 01932 7222
- Dr Odemuyiwa's Secretary – 01372 735 128
(If you have been referred from Epsom Hospital)

Why do I need an Angiogram?

An angiogram is performed to find out whether your heart arteries have become narrowed and whether the flow of blood to the heart is reduced. Narrowing of the arteries may be the cause of symptoms such as pain in the chest called angina.

We may also look at the valves and the pumping chamber in the heart.

USEFUL WEBSITES:

Further information may be obtained by logging on to any of the following websites:

www.bcs.com

www.bhf.org.uk

www.dvla.gov.uk

www.nhsdirect.nhs.uk

www.patient.co.uk

Further Information:

- NHS smoking helpline: 0800 0224332 and at
www.smokfree.nhs.uk

Advice on maintaining a healthy weight: www.eatwell.gov.uk

complaints policy by contacting any of the staff on the ward or the Angiography Suite.

This procedure is carried out by a cardiologist (heart specialist) using X-ray screening. X-ray screening may be harmful to a foetus, so please tell your Consultant or the Angiography Suite if you are, or think you may be pregnant, as soon as possible.

Are there any Alternatives to an Angiogram?

You can have an exercise test and scans which have fewer risks; however, they may not give your doctor enough information to decide on the best treatment for you.

What will happen if I decide not to have the Angiogram?

Your doctor may recommend other tests and scans that can give some information about your coronary arteries and how well your heart is working. If your doctor has recommended a bypass operation, heart-valve surgery or angioplasty, you may first need to have an angiogram. If you decide not to have an angiogram you should discuss this carefully with your doctor.

Before the Angiogram Procedure

WARFARIN

If you take Warfarin, you will be given advice for managing your medication before, during and after the procedure. If you are not sure when to stop your Warfarin, you must contact the Angiography Suite at least **one week** prior to your procedure. You will also need to have a blood test at an anticoagulation clinic, 7-10 days after your angiogram, to ensure your levels have stabilised.

DIABETIC PATIENTS

If you have diabetes and use insulin, please contact the Diabetes Nurse **one week** before your procedure to receive appropriate advice for managing your medication and diet before and during the test. The number to ring is:

- **St Peters Hospital** 01932 723315 and ask for the Diabetes Nurse.
- **Epsom Hospital** 01372 73 5444 and ask for the Diabetes Nurse

If you have diabetes and are taking metformin / avanadamet tablets, you should stop taking the tablets the **day before** your procedure. Do not stop taking other diabetic tablets. Bring your glucose tablets with you on the day of your procedure.

The Evening before your Procedure

You must avoid alcohol for 24 hours before and after the angiogram to avoid any complications from bleeding.

On the evening before your procedure, please shave your right groin 2-3 inches either side of the groin crease. If you are unable to manage the shave please do not worry, a nurse will help you when you arrive on the ward.

On the Day of your Angiogram

If your procedure is in the morning, you must not eat or drink anything after 6.00 am. If your procedure is in the afternoon, you can have a snack and drink up to 11.00 am.

If, after reading this leaflet you have any further questions regarding the necessity for this procedure and/or concerns about going through the procedure, please contact the cardiologist responsible for your care via the appropriate consultant's secretary listed below:

Dr Beeton: 01932 722 308

Dr Fluck: 01932 722 069

Dr Jacques: 01932 722 230

Dr Odemuyiwa: 01372 735 128

Dr Wilkinson: 01932 722 230

Patient Feedback

All patients will be offered the opportunity to complete a patient satisfaction survey at the end of their procedure. This information is audited and available to patients. Every effort is made to improve the service we offer. We would also appreciate your comments regarding this information if you think it could be improved in some way.

Complaints

If you are unhappy with any aspect of the service provided within the Angiography suite or ward, we do apologise. If you would like to make a complaint, please address your letter to either, the Angiography Services Manager and post to Angiography Suite, St Peters Hospital, Guildford Road, Chertsey. KT16 0PZ or alternatively you can request a copy of the InHealth or NHS Trust

- In 1 in 100 cases, a patient will have a mild allergic reaction to the contrast (dye). This is usually very mild and temporary, such as a skin rash, headache, nausea or visual disturbance.
- In 1 in 500 cases, the catheter may cause damage to the groin artery requiring surgical repair.
- In 1 in 1000 cases, the test may lead to a heart attack, stroke or death. The risk may be increased if you are experiencing angina or heart attack at the time of the procedure or if you have diabetes.
- In 1 in 1000 cases the test may cause an interruption of the blood flow supply to the brain causing a stroke.
- In 1 in 1000 cases, the test will require emergency Coronary Angioplasty (balloon treatment) or a Coronary Artery Bypass Graft surgery.

Angioplasty is a procedure undertaken to improve the blood supply to the heart muscle using a balloon and, in some cases, a stent. A stent is a small mesh tube introduced into the artery and positioned at the site of the narrowing.

A Coronary Artery Bypass Graft is a surgical procedure where a blood vessel (artery or vein) is removed from one part of the body and replaced on the heart to "bypass" a blocked coronary artery. This procedure is not performed at St Peters Hospital.

Alternatives to a Coronary Angiogram

Other tests such as an ECG, echocardiogram, blood tests, or treadmill ECG are available, but these will not show narrowing of the coronary arteries, which is the main benefit of having the Coronary Angiogram procedure.

For both morning and afternoon procedures, you should take your usual medication (including blood pressure or water tablets) at 6.00 am with a small amount of water on the day of your procedure. If you are taking Aspirin and Clopidogrel for a coronary stent please continue to take these tablets as normal. If you do not have a coronary stent please do not take your aspirin, Clopidogrel (Plavix) or dipyridamole (Persantin) in the morning. Please bring all your medications with you on the day of the procedure.

Please bring your dressing gown and slippers with you. Nightclothes are not necessary as you will be given a gown to wear.

Avoid bringing any valuables or cash with you, as they may be left unattended while you are undergoing your procedure.

You may wish to bring some reading material to occupy yourself after the procedure.

Should you require a chaperone or interpreter, please inform the Angiography Suite prior to your procedure.

Where do I go for my Procedure?

Please arrive at Maple ward, St Peters Hospital at the time requested on your appointment letter. Maple ward can be accessed from the Out Patient Departmental block or via the Duchess of Kent wing.

Telephone: **01932 722431**

Please note, Maple Ward is a same-sex gender ward. Occasionally there may be some delay in obtaining a bed for you due to emergency admissions. We are sorry if this happens and

will keep you fully informed of progress and the availability of a bed for you.

The ward is not suitable for visiting children.

Due to limited space in Maple Ward, we ask that no relatives or friends remain with you for the day. They may drop you off and collect you.

You must be escorted or be driven home after the procedure, as you must not drive for 24 hours. A responsible adult should stay with you overnight.

The Angiogram Procedure

During your admission, you will be asked to put on a gown and paper pants. Your details will be checked and a name band placed on your wrist.

You will sign your consent form with a cardiologist.

The procedure is performed in a special x-ray room called a cardiac catheterisation laboratory. It looks like a small operating theatre. You will be asked to walk to the catheter laboratory. If you are unable to walk, a wheelchair will be provided.

There will be several members of staff in the room during the procedure including a doctor, nurses, a cardiac physiologist and a radiographer.

You will be asked to lie on your back on a special x-ray table. The radiographer will move the table and camera into position so that the x-ray pictures can be taken.

The procedure will most often be undertaken through the groin or wrist artery and will take approximately 30-45 minutes. In a few

Bruising around the puncture site is common and can extend towards the knee or upper arm. This may take 2-3 weeks to clear.

It is normal to feel some soreness around the groin area and a painkiller such as Paracetamol is usually helpful. Do not take Aspirin as a painkiller.

If the lump feels larger than pea-sized, appears to be increasing in size, with the bruising getting darker, harder and painful, or you notice a discharge, you must see your GP or call the Angiography Suite on 01932 722262. If out of hours, you should contact your local Emergency Department.

For patients with a groin puncture, it is important to avoid constipation, particularly in the first week, as straining can increase pressure on the wound site.

Benefits of a Coronary Angiogram

Having a coronary angiogram will give your cardiologist detailed information about your coronary arteries and if there is any reduction in blood flow to your heart caused by any narrowing.

This will enable your consultant to decide what if any further treatment is required.

Risks Associated with a Coronary Angiogram

In order to consent for the angiogram procedure, you must understand the possible adverse effects and risks involved. These are:

- Bleeding or bruising around the area where the catheter was inserted.

If the procedure was performed via the elbow artery, the dressing can be removed after 24 hours. You do not need to replace it if the wound looks dry. You will need to make an appointment at your GP's surgery to have the stitches removed on the 5th day after your test.

Going Home from Hospital

A discharge information sheet will be given to you by the Day Ward nurse.

You must not drive for 24 hours after discharge. Please arrange to be driven home and for a responsible adult to stay with you for 24 hours.

If the puncture site begins to bleed, you or the responsible adult should press firmly over the area for 10 minutes. It is important to contact your GP or the Angiography Suite for further advice.

During the first 48 hours after your angiogram your activities should be restricted. You should not do any heavy lifting, bending, or drink alcohol to ensure recovery of the artery. If the groin artery has been used, when moving in and out of the car, going up and down stairs or sneezing, coughing or laughing, apply gentle pressure to the groin area to support it and prevent pain.

Keep the area clean and dry. Do not apply talc to the area for 48 hours. Do not have a hot bath or shower the evening of your angiogram as it may disturb your wound and increase the chance of bleeding. Avoid baths for 48 hours but showers are acceptable from the next day.

At first the puncture site may feel tender and bruised and you may develop a small pea sized lump if the groin approach has been used. This is normal and should flatten within the next 2-4 weeks.

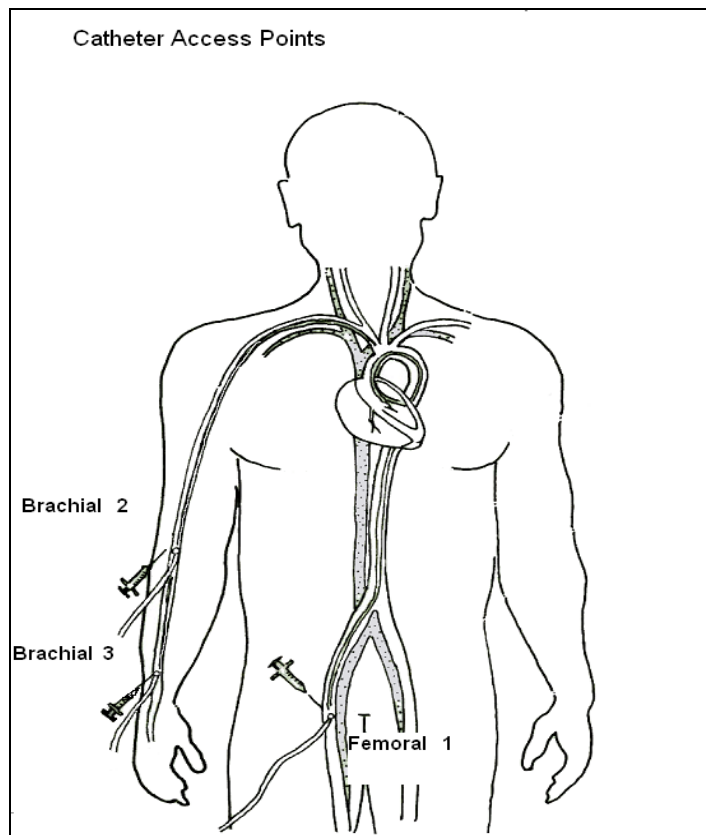
cases, due to problems with circulation of blood in the legs the catheter will be introduced through the artery in the elbow.

A doctor and nurse will be with you at all times. You will not be asleep but, if required, some sedation or a painkiller can be given.

ECG electrodes that allow for the continuous recording of your heartbeat will be placed on your chest and limbs.

The radiographer will move the table and camera into position so that the x-ray pictures can be taken.

The skin around the groin (or in the arm or wrist) is numbed with a local anaesthetic; this will sting for a moment. Once numb the doctor will insert a small tube, called a sheath, into the artery. A catheter is then inserted through the sheath and guided through the artery until it reaches the heart.



Contrast (dye) is injected into the coronary arteries in order to outline them on the x-ray machine. You may be asked to hold your breath for a few seconds when the picture is taken. During one of the pictures, you may feel a hot flush as the contrast is injected and you may feel as if you have passed urine. This is only a momentary feeling and will pass quickly. At the end of the procedure the catheter will be removed by the doctor.

A nurse will apply pressure to the puncture site for approximately 10 minutes after the sheath is removed. Some patients receive an internal plug in the groin artery called an Angio-Seal. You will then be taken back to the ward. If the incision is in the middle of the

arm, you will receive 3-4 stitches. If the wrist artery has been used, a pressure device will be applied to the wrist for approximately 2 hours.

A doctor will discuss the results of the angiogram with you and give you the opportunity to ask any questions. The doctor will discuss any changes to your medication or further treatment that may be required. A letter will be sent to your GP confirming this information.

You will then rest in the ward for 1-2 hours. For the groin artery, the first hour you will be nursed flat with one pillow. If you have received an Angioseal plug you will be able to sit up after your procedure.

It is important that you do not bend your leg during this time to avoid bleeding from the groin site. Your foot pulse will be checked regularly to detect any restriction in blood flow to the limb as a result of the procedure. The ward nurse will regularly observe your groin area for any bleeding or swelling and will record your blood pressure and heart rate.

If the elbow or wrist artery is used, you will need to rest for 2-3 hours. Your wrist pulse will be checked to detect any restriction in blood flow to the arm as a result of the procedure.

You may eat and drink on return to the ward. It is important to drink plenty of fluids as this will help to flush the contrast dye through your kidneys.

Providing there are no complications, you will be allowed to go home later in the day.

The groin/wrist site will be covered with a plaster that should be removed after 24 hours. Do not replace if the puncture site looks dry.