Ashford and St. Peter's Hospitals NHS
NHS Foundation Trust

We can provide interpreters for a variety of languages, information in larger print or other formats (e.g. audio) - please call us on 01932 723553.

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

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اگرآپ اِس کا اُردو زبان میں ترجمہ چاہتے ہیں، تو براہِ کرم اِس فون نمبر 01932 723553 پر رابطہ کریں

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Ashford and St. Peter's Hospitals NHS
NHS Foundation Trust

Undergoing Coronary Angioplasty / Stent Implantation

Advice for Patients and their Carers

InHealth

Epsom and St. Helier University Hospitals NHS
NHS Trust

Patient Information

Undergoing Coronary Angioplasty / Stent Implantation

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

USEFUL WEBSITES

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

www.bcs.com, www.bhf.org.uk, www.dvla.gov.uk, www.patient.co.uk

Further Information:

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

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

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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Benefits of Coronary Angioplasty/Stent

The benefits of this procedure are to open up the narrowing in the coronary artery and improve blood flow to the heart muscle, thus reducing your symptoms.

Risks of Coronary Angioplasty/Stent

Generally, coronary angioplasty is a safe procedure, but there can be rare complications. In order to consent for the angiogram procedure, you must understand the possible adverse effects and risks involved. These are:

- In 1 in 100 (1%) of cases patients have an allergic reaction to the contrast (dye). This is usually very mild, and temporary, such as a skin rash, headache, nausea or visual disturbance.
- In 5 in 100 (5%) of cases it is not possible to stretch the artery and in 1 in 100 (1%) of cases the procedure can cause the artery to rupture. In this event, an operation such as coronary artery bypass graft (CABG) may be required.
- In less than 1 in 100 (1%) of cases the procedure may also be linked to stroke, heart attack or death.

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.

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Introduction – Information for Patients and Carers

This booklet has been prepared for patients undergoing a coronary angioplasty/stent implantation at St Peter's 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 procedure. Your doctor has recommended this procedure .however, it is your decision to go ahead with the procedure or not.

InHealth Group is an independent service provider working in partnership with Ashford & St Peter's NHS Trust and Epsom & St Helier University Hospitals NHS Trust 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 722 262

- The Cardiac Nurse Specialist - 01932 723534

We would like to acknowledge the support of St George's Healthcare NHS Trust for content included in this booklet

Why do I need a Coronary Angioplasty/Stent?

The coronary arteries supply the heart muscle with oxygen carried in the blood. In some people these arteries become narrowed and the flow of blood to the heart muscle is reduced.

At times when the heart is working harder, for example during exercise, the reduced blood supply to areas of the heart can cause pain in the chest. This pain is known as angina.

An angioplasty is a procedure undertaken to improve the blood supply to the heart muscle

Before the Angioplasty/Stent Procedure

ASPIRIN AND CLOPIDOGREL (PLAVIX)

You must be taking both aspirin and Clopidogrel (or a suitable alternative) before your angioplasty procedure. If you are not taking both of these tablets please call the Angiography Suite at least **one week** before your booked angioplasty procedure.

WARFARIN

If you take Warfarin, you will be given advice for managing your medication before, during and after the procedure. You must contact the Angiography Suite at least **one week** prior to your procedure for information and advice on taking your Warfarin. You

take your prescribed daily dose, unless you are told otherwise by your Cardiologist.

Your doctor may also prescribe other medications and it is extremely important that you follow your medication regime exactly.

General Information after Angioplasty/Stent Implantation

RETURNING TO WORK

The decision about how soon to return to work will depend on your own medical history and the type of employment you undertake. You should discuss this with your doctor or the cardiac rehabilitation nurse before you leave the hospital.

DRIVING

You should not drive for at least one week following a successful angioplasty/stent. However, if you came into hospital with a heart attack, you should not drive for at least 4 weeks.

You do not need to inform the DVLA unless you hold a PSV or HGV licence, but you should inform your insurance company.

If you are a PSV or HGV driver you should inform the DVLA immediately For more information contact the DVLA on **0870 240 0009**, or look on the web at www.dvla.gov.uk.

TRAVELLING AND HOLIDAYS

Unless you have had a recent heart attack, there are no restrictions on holidays or flying.

- Do not stop taking any of the prescribed medications unless you are instructed to do so by the doctor who implanted your stent, and only this doctor.
- If you experience any side effects of the medications, such as headaches, nausea, vomiting or rash, notify your GP immediately.
- Report any change in angina symptoms, such as severity or frequency, to your GP.
- Attend all appointments for follow-up care, including blood testing.
- Do not have a Magnetic Resonance Imaging (MRI) medical scan within 8 weeks of stent implantation without clearance from your cardiologist.
- Do not use antacids routinely (only use on a one-off basis), unless prescribed by your doctor, as they decrease the absorption of aspirin and other medications. If you are using these more often, please seek the advice of your GP.

Do not have any dental work carried out during the first month after your stent insertion. Should you need any dental work carried out, tell your dentist you are taking blood thinners

DRUGS

When you are discharged from hospital, the tablets you are taking may have been changed. If you have any questions about your tablets please ask before you leave the hospital. You will be given two weeks' supply of tablets to take home but you will need to get further prescriptions from your GP.

Most patients will need to take aspirin and Clopidogrel for at least 1 year after your procedure. It is important that you continue to

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 procedure. 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 test. Do not stop taking other diabetic tablets. Bring your glucose tablets with you on the day of your test.

The Evening before your Procedure

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

You must not eat or drink anything after 12 midnight.

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 Procedure

You should take your usual medication (including Aspirin, Clopidogrel (Plavix), blood pressure or water tablets) at 6.00 am with a small amount of water. 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 test.

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

If the puncture site begins to bleed, you or the responsible adult should press firmly over the area for 10 minutes.

If the lump feels larger than pea-sized, appears to be increasing in size, becomes increasingly painful, the bruising gets darker and harder, or if you notice a discharge, you must see your GP or call the **Angiography Suite**, telephone **01932 722 262.**

It is normal to feel some pain from the wound and a simple painkiller, such as Paracetamol, is usually helpful. Do not take additional Aspirin as a painkiller.

It is important to avoid constipation, particularly in the first week, as straining can increase pressure on the wound site.

During the first few days after your angioplasty/stent, your activities should be restricted. You should not do any heavy lifting, bending, or drink alcohol for the first 24 to 48 hours. When going up stairs, coughing or sneezing, apply gentle pressure to the groin area to support and prevent wound pain.

You may have many questions about getting back to normal. Please ask the doctors and nurses about any concerns you have before you go home. If, however, you think of something after you have gone home, please call your local Cardiac Rehabilitation Team (telephone numbers are on page 2 of this booklet) or if your query is urgent, or out of office hours, call the **Coronary Care Unit, telephone 01932 722484.**

Specific Advice for Patients after Stent Implantation

Please carefully follow these instructions:

- You must follow your medication regime exactly.

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 to detect any restriction in blood flow to the limb as a result of the procedure.

You may eat and drink on return to the ward or CCU. 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 if you are a day case and the following day if an inpatient (unless you are recovering from a heart attack).

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

Going Home from Hospital

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

Please arrange to be driven home and for a responsible adult to stay with you for 24 hours.

THE WOUND

At first the groin may feel tender and bruised and you may develop a small pea sized lump. This is normal and should flatten within the next 2-4 weeks. Bruising around the puncture site, can extend towards the knee and into the abdomen. This may take 2-3 weeks to clear.

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 Angioplasty/Stent 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. An ECG will be taken of the electrical conduction of your heart.

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 angioplasty procedure is similar to a cardiac catheter or angiogram. The skin around the artery in your groin (or wrist) is numbed with a local anaesthetic. When the area is numb, the doctor inserts a small tube, called a sheath, into the artery. A fine

tube, called a catheter, is then inserted through the sheath and guided through the artery until it reaches the heart.

As with an angiogram, contrast is inserted into the coronary arteries in order to outline them on the x-ray.

The doctor then positions the catheter into the opening of the narrowed coronary artery. Once the catheter is in position, a very fine guide wire is passed up through the centre of the catheter, and is directed through the narrowed artery.

The doctor will then pass a balloon catheter over the fine guide wire. Using markers on the balloon they will position the deflated balloon into the narrowed area of the artery. The balloon at the end of the catheter is inflated and this widens the artery. The balloon is then deflated and withdrawn. Before removing the catheter the doctor takes some x-ray pictures to see how well the artery has opened. During some of these procedures, the doctor may use a balloon and one or more stents to keep the artery open.

What is a Coronary Stent?

A coronary stent is a small, stainless steel or alloyed metal mesh tube mounted on to a balloon catheter. It is introduced into the artery and positioned at the site of narrowing.

When the balloon is inflated the stent expands and is pressed against the inner walls of the artery. One or more stents may be used in the vessel to span the length of the narrowing. After the balloon is deflated and removed the stent remains in place, keeping the artery open.

The stent is a permanent implant that remains in your artery. It helps hold the artery open, improves blood flow and can relieve symptoms of coronary artery disease, such as angina.

A bare metal or drug coated stent will be used depending on your medical history and the condition of your coronary arteries.

The Angioplasty/Stent procedure

The angioplasty will take approximately an hour. You may be given some drugs during the procedure to thin the blood and relieve any angina. At the end of the procedure most patients will receive an internal plug in the groin artery called an Angio-Seal. For some patients the Angio-Seal will not be suitable and the groin tube will be removed later in the day ward or CCU.

A doctor will discuss the results of the angioplasty/stent 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 or CCU for 5-6 hours. Your heart, blood pressure and foot pulses will be monitored for the first 4 hours. If you have received an Angio-Seal plug you will be able to sit up after your procedure. If an Angio-Seal was not suitable, you will need to lie flat with pillows until the groin artery has been sealed with external pressure. Usually the sheath will be removed around 4-6 hours after the procedure, but this will depend on your blood test to determine how quickly your blood will clot. It is likely that a nurse or doctor will need to press on the groin puncture for approximately 10-20 minutes. On some occasions a clamp compression device will be used.