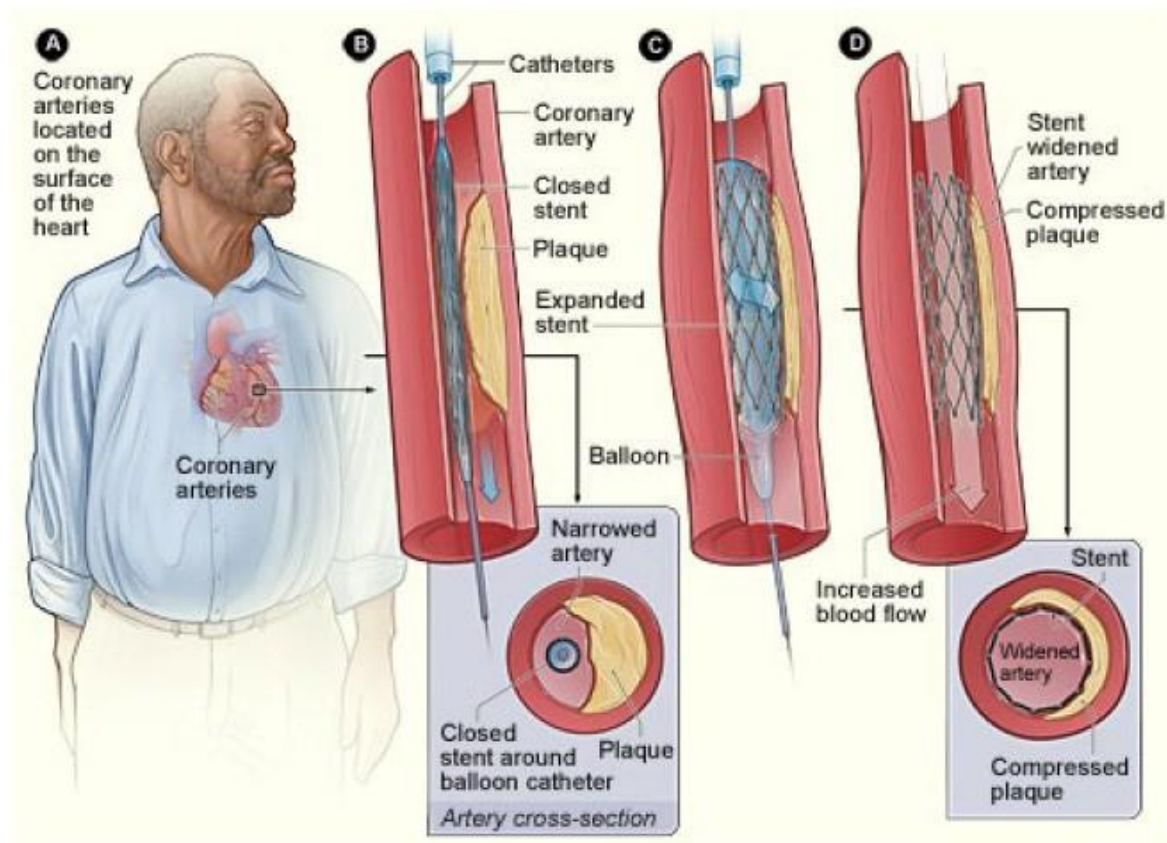


Angioplasty & Coronary Stenting

What is an Angioplasty and why do I need one ?

Angioplasty is a specialist treatment which opens a narrowed or blocked coronary artery on the surface of your heart. These arteries bring blood to your heart muscle and when narrowed cause angina. When they block suddenly they cause a heart attack also called a myocardial infarction. Angioplasty is very similar to a Cardiac Catheterisation or Angiogram procedure which you will have had prior to your angioplasty and which demonstrated your narrowed or blocked coronary artery. A Coronary Stent is an expandable mesh tube which is implanted into a narrowed artery to permanently hold it open to improve blood flow.



What to expect when having an Angioplasty / Coronary Stenting procedure

This procedure takes approximately 40 – 60 minutes. From time to time, the Cardiology Department can experience delays due to the nature of the illnesses we deal with and cases which need urgent attention. We do our best to minimise delays and to keep you informed

- A light breakfast (e.g: tea and toast) may be taken on the morning of the procedure unless instructed to fast.
- Additional blood thinning medication may be prescribed for you to take before and after the procedure.
- You will be admitted to the Hospital. Most people stay in hospital overnight after the procedure.
- An intravenous (IV) line is placed in a vein in your arm to give fluids and medication as needed during the procedure.
- When arranging your appointment, please tell us about any medication you are taking and discuss any instructions with your doctor.
- Unless your doctor tells you differently, medications should be taken as usual.

Blood Thinners

- You should ideally be taking Aspirin and a second antiplatelet medication such as Clopidogrel (Plavix), Ticagrelor (Brilique) or Prasugrel (Effient) for at least 4 days prior to your procedure
- If you are on Warfarin, you should skip 3 doses prior to your procedure
- If you are on Dabigatran (Pradaxa), Rivaroxaban (Xarelto), Apixaban (Eliquis) or Edoxaban (Lixiana), you should not take this the night before or on the morning of your procedure.
- If you are on your blood thinner because you have a metallic heart valve or because you have had a stroke or mini-stroke please call the cath lab nurses (01 803-2312) to confirm that it is safe and appropriate for you to stop your blood thinners prior to your procedure

How an Angioplasty / Coronary Stenting procedure works

During an Angioplasty a small balloon is inflated from inside a narrowed or blocked artery to widen it. The balloon widens the artery by squashing the fatty plaque causing the narrowing or blockage. You will be awake during the angioplasty but will receive a small amount of sedation to help you relax.

- The doctor will access the artery via the groin or radial (wrist) area. This will be decided by the Consultant Cardiologist.
- A local anaesthetic is administered to the area.
- Once the area is numb, an incision is made and a needle is inserted into the blood vessel.
- A catheter is then passed over this needle and gently pushed up thorough the blood vessel to the blocked or narrowed artery. Contrast (dye) is used to guide the positioning of balloons (angioplasty) and stents.
- Once the catheter is in place, another thinner catheter with a tiny balloon on the tip is pushed up through the centre of the first catheter.

- When it reaches the blocked or narrowed area, the balloon at the tip is gently inflated several times to widen the artery.
- You may feel chest pain while the balloon is being inflated. The pain usually disappears after the balloon is deflated.
- If a stent is being inserted the stent is placed on the tip of the balloon. When the balloon reaches the narrowed area it is inflated, expanding the stent which becomes embedded in the wall of the artery.
- The stent remains in place and the balloons catheters and wires are then removed.

Radiation

- Ionising radiation is used to take images during this procedure. The Radiographer will optimise your X-ray examination, keeping your radiation dose as low as possible.
- As X-ray is used, women aged between 12 - 55 years old will be asked to provide the first date of their last menstrual period (LMP) and sign a "Pregnancy Status Declaration" form. If your period is overdue, a urine pregnancy test will be taken before your procedure. If you are aware that you are pregnant please inform the Nurse/Radiographer attending to you.

Radiation warning

Your procedure, which your doctor has recommended, involves the use of ionising radiation (X-rays). We monitor the radiation dose used throughout the case. High doses of radiation may be associated with some health risks, such as slightly elevated cancer risk or skin reddening. Although the doses of radiation usually incurred in a given procedure are small, it is possible that cumulative exposure received may produce a reaction such as skin reddening (very like sunburn). If levels measured indicate that the cumulative exposure could cause such skin reactions, then appropriate advice will be given and monitoring for any possible reactions instigated.

Sedation

Sedation is sometimes used during an Angioplasty. If sedation is required during the procedure please note the following;

- Sedation can cause drowsiness and increase your risk of falling.
- Do not drive for 24 hours. Please make arrangements for an adult to collect you to bring you home.
- Do not consume alcohol within 24 hours post procedure.
- Avoid making any legal decisions or signing any legal documentation.
- Do not operate heavy machinery.

Your role in the procedure

Please try to refrain from moving your legs or arms in the sterile working area. If you feel any discomfort or uncomfortable symptoms during the procedure for example chest pain, dizziness or shortness of breath please let your doctor or nurse know so they can assess you and take measures to help you get more comfortable.

Preparation

- You do not need to fast for this procedure

- Bring in a list of your regular medications
- If you are diabetic, eat & drink as normal and take your insulin/medications as usual.
- Ensure you have someone to collect you after the procedure. If you have nobody to collect you or stay overnight with you, contact us to inform us of same- 01 803-2312 as it may not be safe for us to proceed with your procedure without someone to look after you.

Blood Thinners

- If you are taking Aspirin and / or a second antiplatelet medication such as Clopidogrel (Plavix), Ticagrelor (Brilique) or Prasugrel (Effient), please continue these without any interruption
- If you are on Warfarin, you should skip 3 doses prior to your procedure
- If you are on Dabigatran (Pradaxa), Rivaroxaban (Xarelto), Apixaban (Eliquis) or Edoxaban (Lixiana), you should not take this the night before or on the morning of your procedure.
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Post procedure

- The tube in your arm/leg will be removed at the end of the procedure. If the procedure is done through your leg, the doctor or nurse will press on the site for 10-15 minutes to stop any bleeding or alternatively use a special closure device . You will need to lay flat for 4 hours. If it is done through your wrist, you will have a tight bracelet in place for 3-4 hours. As a result, recovery can take 4-5 hours.
- Coronary stenting procedures may be performed as day case procedures or you may be required to stay in hospital overnight after the procedure.
- Your doctor will discuss the results of the Angioplasty / Stenting procedure with you at the end of the procedure.
- A letter will be sent to your GP and or referring doctor detailing the results and any recommendations for further treatment.

Discharge

- You may be at an increased risk of falls due to the medications administered. Therefore, you will be advised to stay on a trolley until the nurse deems you safe to mobilise and for discharge. Please take care when leaving the hospital with supervision and for 24 hours at home.
- You cannot drive for 48 hours after your procedure.
- Risk of bleeding
 - Avoid heavy lifting
 - Avoid using your hand or applying pressure to the arm used for the procedure
 - Avoid immersing it in hot water
 - If femoral (groin) access, no bending
 - When coughing/sneezing , apply pressure to site

Potential risks, complications

These procedures are usually relatively painless though minor discomfort such as the following may occur:

- Possible discomfort when injecting local anaesthetic.
- Pressure when the tube is being inserted.
- Occasionally injecting the dye into the heart arteries can cause chest discomfort, palpitations or chest pain. This can also occur when the stent is being placed in the artery. Occasionally nausea or vomiting may occur.
- Usually there is some bruising mild soreness or mild oozing around the incision site following the procedure.
- If bleeding occurs, a pressure dressing may be placed on the wound to stop it. Very rarely, the wound may need to be reopened to remove collected blood and treat the source of the bleeding.
- Possible reaction to medications administered.

Major complications are rare – less than 1 in 100 cases

- A sudden narrowing due to clotting or a tear in the inner wall of the artery. This can usually be corrected during the procedure. It could result in a heart attack, the need for emergency by-pass surgery or sudden death.
- Occasionally the closure device can malfunction and fail to prevent bleeding or bruising.
- Very rarely the device can become infected and require antibiotics or surgical correction.

Very serious complications happen very infrequently and in less than 1 in 500 cases

- Disturbances of heart rhythm
- Allergic reactions to x-ray dye.
- Low blood pressure
- Damage to kidney function requiring dialysis
- Infection of blood, heart valve or puncture site
- Stroke or clot
- Damage to blood vessels
- Limb loss
- Heart attack or death

Please contact the Cath lab if you develop any complications 01 803 2312 (08.00-20.00 Mon-Fri) for advice. However, if you become acutely unwell or notice sudden bleeding that doesn't stop after applying pressure, call 112 or attend your local A&E.

Useful websites:

https://www.rsa.ie/Documents/Licensed%20Drivers/Medical_Issues/Medical%20Fitness%20Guidelines.pdf

<https://www.hse.ie/eng/health/az/c/coronary-angiography/risks-of-a-coronary-angiography.html>



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