

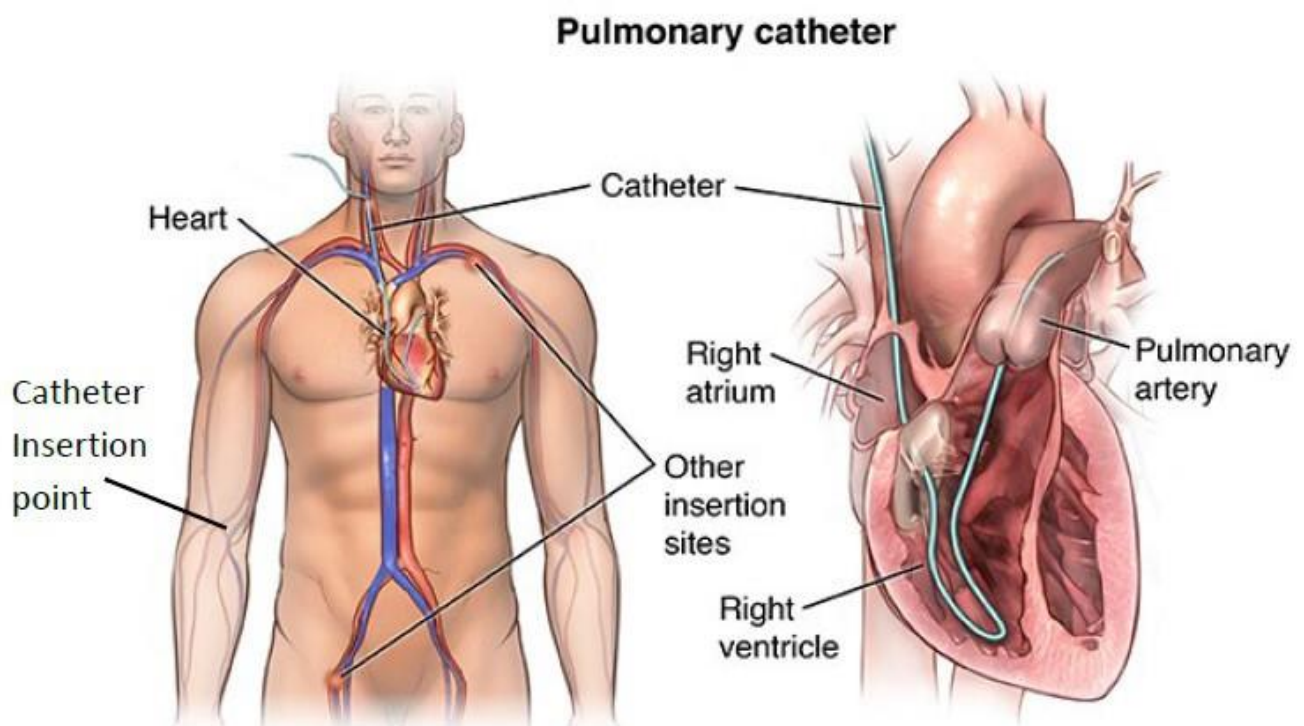
Right Heart Catheterisation

What is a right heart Catheterisation and why do we do them?

A right-heart catheterisation is carried out to see how well or poorly your heart is pumping, and to measure the pressures in your heart and lungs. During a right-heart catheterisation, the doctor guides a special catheter (a small, hollow tube) to the right side of your heart. This may be passed through a vein in the arm, the side of the neck, the groin or under the collar bone. The doctor then passes the tube into your pulmonary artery. This is the main artery that carries blood to your lungs. This will allow the doctor to observe blood flow through your heart and measure the pressures inside your heart and lungs and calculates the volume of blood your heart pumps per minute.

The procedure is carried out to assess the following:

- Heart Failure- how well the heart is pumping blood out to your body
- Pulmonary hypertension- increased pressures in the blood vessels in your lungs. This can lead to trouble breathing and right-sided heart failure.
- Transplant - to assess your heart function pre- or post-heart transplant
- To assess your response to medications for any of the above conditions.



What to expect during a Right Heart Catheterisation

You will be checked in by a nurse and doctor. Bloods will be taken and an IV Cannula inserted in your arm. The doctor will discuss the procedure with you and get you to sign a consent form.

You will be brought into the procedure room and placed lying on your back on the x-ray table and attached to a monitor. There will be an x-ray machine over you to help us take the images. This will move during the procedure but don't worry it won't harm you.

The procedure is carried out through a vein in your leg, your arm, neck or beneath the collar bone. The area is numbed with local anaesthetic. The doctor then places a tube into the vein that helps guide the catheter into your heart. The procedure is carried out under a special x-ray to see the heart and lungs. The pressures inside your heart and the pulmonary artery are measured using a special catheter and blood samples are taken to measure your oxygen levels.

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 rarely used during a right heart catheterisation, however, if sedation is required during the procedure; please use the following guidelines;

- Don't drive for 48 hours - **make sure you organise a lift home**
- Don't consume alcohol within 24 hours post procedure
- Avoid making any legal decisions or signing any legal documentation
- Don't operate heavy machinery
- You are a higher risk for falls

Your role in the procedure

Please try to refrain from moving your legs, arms or neck in the sterile working area. If you feel any discomfort or uncomfortable symptoms during the procedure for example 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 for the day of the procedure

- Have a breakfast that morning, you don't need to fast
- Bring in a list of your regular medications
- If you are diabetic, eat & drink as normal and take your 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 8032312 as it may not be safe for us to proceed with your procedure if you have nobody 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 can continue this uninterrupted
- If you are on Dabigatran (Pradaxa), Rivaroxaban (Xarelto), Apixaban (Eliquis) or Edoxaban (Lixiana), you should skip one dose on the morning of your procedure.

Post Procedure

The tube is removed from the vein in your leg, arm or neck and the doctor or nurse will apply pressure onto the site to stop it from bleeding. If it is done through the leg you will be required to lay flat for two hours. If it is done via the vein in your neck or arm you may sit up after the procedure.

Elective right heart catheterisations are usually day case procedures; you are discharged later that day with a family member or friend who will be collecting you.

However for some patients, right heart catheterisations are required to guide further treatment and there may be a requirement for the catheter to be left in place to allow close monitoring and immediate treatment adjustments. Patients in this category require a stay in the Coronary Care Unit or Intensive Care Unit until their condition improves.

On discharge

- You are at an increased risk of falls if sedative medications are administered. You are 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 as per RSA Guidelines.
- Risk of bleeding
 - Avoid heavy lifting
 - Avoid using your arm, applying pressure to arm
 - Avoid immersing it in hot water
 - If the vein at the top of your leg is accessed avoid bending
 - When coughing/sneezing, apply pressure to site (top of leg)

Potential Complications


- Bleeding, bruising, swelling at puncture site
- Pain or discomfort at site
- Change in colour, temperature appearance of the limb (arm/leg)
- Chest pain or shortness of breath
- Signs of infection or redness at site or new temperature

Please contact 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.



Catheterisation Laboratory

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 01-803 2312