

Angiography



What is Coronary Angiography?

Coronary angiography is a procedure in which a special X-ray of the coronary arteries is taken to see if there is any narrowing or blockages.

During the coronary angiography you will be given a local anaesthetic, a small puncture will be made in your groin or wrist to allow for a catheter to be fed to your heart. A special dye is then injected into your coronary arteries and X-rays (coronary angiogram) are taken. The coronary angiogram gives the Cardiologist detailed information about the structure and function of your heart and coronary arteries.

Why do I need Coronary Angiography?

The coronary angiography procedure is undertaken when you have, or your Cardiologist suspects you may have Coronary Heart Disease.

This procedure may be recommended if you have experienced chest pain that your Cardiologist suspects may be caused by narrowing in the coronary arteries or if your doctor wants to assess the degree of narrowing to assess whether you would benefit from further procedures such as coronary angioplasty or bypass surgery to reduce your risk of heart problems. It may also be recommended before valve surgery or non-cardiac surgeries to assess your tolerance for anaesthetic.

Coronary angiography may also be recommended if you've previously had a heart attack and continue to have chest pain or the results of an Exercise Stress Test indicate a need for further investigation.

How do I prepare for Coronary Angiography?

As this procedure is undertaken in hospital you will need to complete your admission paperwork, which the Nepean Cardiology staff will provide to you, and return to the admitting hospital at least three days prior to your admission date. This paperwork can be submitted online for Peninsula Private Hospital if you'd prefer.

You will need to fast for six hours prior to the admission time however any medication you need to continue to take can be taken with a sip of water.

If you are currently prescribed Warfarin you will need to cease taking this medication five days prior to your admission. If you are prescribed Xeralto, Eliquis or Pradaxa you will need to cease these medications 48 hours prior to your procedure. Please continue to take Aspirin, Plavix and any other medications as normal unless specifically directed by your Cardiologist to cease them. Please bring a list of current medications, or the medication bottles with you to the hospital.

Please pack and overnight bag in the event that a stent is required, Dr Rodney Teperman, our principal cardiologist, is qualified to perform this procedure at the same time. You will need to have someone drive you to and from the hospital, and stay with you at home the night of the procedure. You will not be able to drive yourself or take a taxi alone after the procedure. Please advise the Nepean Cardiology staff if you do not have someone to stay with you after the procedure as they will arrange for an overnight hospital admission.

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What should I expect on the day of my Coronary Angiography?

Once admitted to hospital, you will be asked to remove any jewellery and put a hospital gown on. If required a nurse may shave the area where the catheter is to be inserted. A doctor will then give you a brief physical examination, and answer any questions that you may have.

In some cases you may be given a sedative about an hour prior to the test to help you to relax. However, you will be awake throughout the procedure.

You will be taken to a special operating theatre known as a 'Cath-Lab' on a trolley, or in a wheelchair where you will be asked to lie on a narrow table, which will be moved from side to side during the procedure. Your heart rate will be continuously monitored throughout the procedure. You may also have a small needle inserted in the back of your hand to allow medication to be given during the procedure.

The doctor will inject a local anaesthetic into your groin, arm or wrist and a small cut will be made where the catheter is to be inserted.

The catheter will be moved through the main blood vessel of your body (the aorta), to the beginning of the coronary arteries on your heart. Its progress is monitored via X-rays shown on a monitor. Most people will not feel any pain or sensation during the procedure. There are no nerves inside your arteries, so you will not feel the movement of catheters.

When the catheter is in place, a small amount of X-ray dye will be injected. X-rays will be taken as the dye travels through your coronary arteries. These X-rays will be shown on a monitor within the Cath-Lab and recorded on a computer. Different catheters are needed to study the various arteries. One will be removed and the next introduced through the same location.

Some people experience nausea or discomfort in their chest when the dye is injected, but this does not last long. A larger injection of dye is given if your heart muscle is to be examined. This may give a warm feeling in your upper chest first, then over the rest of your body. The feeling may last for about 10 to 15 seconds.

The procedure will take around 30 to 40 minutes. When the procedure is complete, the catheter will be removed and pressure applied to the area where it was inserted. You will be moved to recovery to rest in bed for at least two hours. In most circumstances, you will be allowed home after two to four hours.

Some people may need to stay in hospital overnight so that their symptoms can be monitored further.

The X-ray dye passes through your kidneys and is excreted in your urine.

What happens afterwards?

Your doctor will explain the results of the procedure and the need for any further procedures. The information about your heart and coronary arteries will help your doctor to recommend the best treatment for you.

Unless coronary angioplasty or stenting is required you will be discharged home if someone is available to stay with you. You should avoid heavy lifting and stairs (if possible) for three days after your procedure and generally take things easy.

Are there any risks?

As with any medical tests, there are some risks, but serious side effects are rare. Most people have no trouble, and the benefits usually far outweigh the risks. You should discuss with your doctor any questions or concerns that you may have about coronary angiography.