

Angiography

Angiography is a type of X-ray used to check blood vessels.

Blood vessels do not show clearly on a normal X-ray, so a special dye needs to be injected into your blood first.

This highlights your blood vessels, allowing your doctor to see any problems.

The X-ray images created during angiography are called angiograms.

Why angiography is used

Angiography is used to check the health of your blood vessels and how blood flows through them.

It can help to diagnose or investigate several problems affecting blood vessels, including:

- atherosclerosis – narrowing of the arteries, which could mean you're at risk of having a stroke or heart attack
- peripheral arterial disease – reduced blood supply to the leg muscles
- a brain aneurysm – a bulge in a blood vessel in your brain
- angina – chest pain caused by reduced blood flow to the heart muscles
- blood clots or a pulmonary embolism – a blockage in the artery supplying your lungs
- a blockage in the blood supply to your kidneys

Angiography may also be used to help plan treatment for some of these conditions.

Angiography is done in a hospital X-ray or radiology department. It usually takes between 30 minutes and 2 hours, and you can usually go home the same day.

Preparing for angiography

You may be asked to attend a hospital appointment to check you can have angiography.

This may involve:

- being asked about your medical history, including if you have any allergies
- being asked about any medicine you're taking – you'll be told if you need to stop taking it before the test
- having tests to check your general health, including a physical examination and blood test
- discussing the procedure, including what it involves, what the risks are, what you need to do before the test and whether you'd like to have a sedative on the day to help you relax

If you decide to have a sedative, you'll be asked to not eat for a few hours before the test.

You'll also need to arrange for someone to take you home from the hospital because you will not be able to drive yourself home.

For the test:

- you'll usually be awake, but general anesthetic (where you're asleep) may be used for young children
- a small cut is made in the skin over 1 of your arteries, usually near your groin or wrist – local anesthetic is used to numb the area so it does not hurt
- a long, thin, flexible tube (catheter) is inserted into the artery and is carefully guided to the area being examined – you may feel some pushing and pulling when this is done, but it should not be painful
- a special dye (contrast agent) is injected through the catheter – you may feel warm, flushed and as though you need to pee for a few seconds after this is done
- a series of X-rays are taken as the dye flows through your blood vessels

Sometimes treatment may be done at the same time, such as inserting a balloon or a small tube to open a narrowed artery. This is known as angioplasty.

After the procedure, the catheter is removed and pressure is placed on the cut to stop any bleeding. Stitches are not needed.

After angiography

After the test, you'll be taken to a recovery ward where you'll be asked to lie still for a few hours to prevent bleeding from the cut.

You'll usually be able to go home the same day, although sometimes you may need to stay in hospital overnight.

It may be possible to let you know the results of the test before you go home. However, the X-rays often need to be studied in detail and the results are not available for a few weeks.

While recovering at home:

- rest for the remainder of the day – it's a good idea for someone to stay with you for at least 24 hours in case you have any problems
- eat and drink as soon as you feel ready to – the contrast dye leaves your body in your pee, so drinking plenty of water can help flush it out faster
- you can usually return to most normal activities the next day, although you may need to avoid heavy lifting and strenuous exercise for a few days

You'll probably have some bruising and soreness for at least a few days.

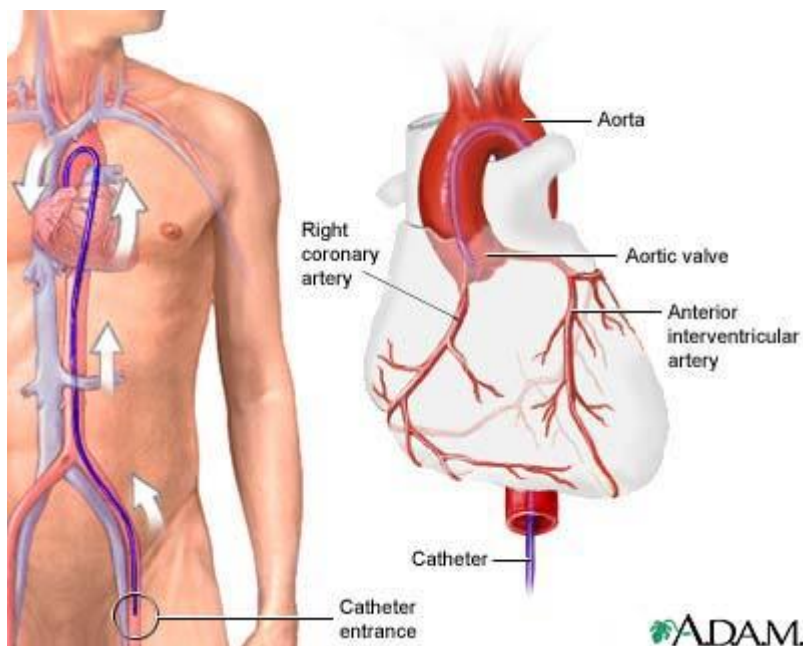
What happens during angiography

Angiography is done in a hospital X-ray or radiology department.

For the test:

- you'll usually be awake, but may be given a medicine called a sedative to help you relax
- you lie on an X-ray table and a small cut (incision) is made over 1 of your arteries, usually near your groin or wrist – local anesthetic is used to numb the area where the cut is made
- a very thin flexible tube (catheter) is inserted into the artery
- the catheter is carefully guided to the area that's being examined (such as the heart)
- a dye (contrast medium) is injected into the catheter
- a series of X-rays are taken as the dye flows through your blood vessels

The test can take between 30 minutes and 2 hours. You'll usually be able to go home a few hours afterwards.



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Risks of angiography

Angiography is generally a safe and painless procedure.

But for a few days or weeks afterwards it's common to have:

- bruising
- soreness
- a very small lump or collection of blood near where the cut was made

There's also a very small risk of more serious complications, such as an allergic reaction to the dye, a stroke or a heart attack.