



A lifetime of specialist care

Royal Brompton & Harefield 
NHS Foundation Trust

Royal Brompton Hospital

Your coronary angiogram





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This leaflet gives general information about your coronary angiogram. It does not replace personal advice from a healthcare professional. If you have any questions, please ask your doctors and nurses.

What is a coronary angiogram?

A coronary angiogram is a test to look at the main blood vessels that supply the heart with blood and oxygen. These blood vessels are called the coronary arteries.

An angiogram shows your doctor how well your heart is working, and the exact location and seriousness of any narrowed areas in your coronary arteries.

Narrowing of the arteries is caused by a build up of a fatty substance, called atheroma.

A thin tube, called a catheter, is inserted into an artery in your wrist or groin. The catheter is directed through your arteries to your heart using X-ray images. Then a special dye is injected through the catheter, so the coronary arteries show clearly on the X-ray.

Benefits of a coronary angiogram

A coronary angiogram gives a better understanding of your heart, and helps your doctor plan the best treatment for your condition.

Risks of a coronary angiogram

All medical procedures carry some risk. An angiogram is a relatively safe test. Less than 1 in 1,000 people (<0.1%) have a serious complication as a result of having a coronary angiogram.

The risks depend on your overall health and the condition of your heart. Your doctor will discuss the risks with you.



Minor complications

Inserting the catheter causes bruising in 1 in 10 people (10%). Sometimes the bruising is painful for a few days, but it will disappear with time.

Blood may build up under the skin to form a lump (haematoma). The haematoma will gradually disappear and does not normally need any treatment.

Removing the catheter can cause bleeding in 1 in 100 people (1%). Bleeding is controlled by applying firm pressure.

Vasovagal attack (fainting) is caused by a drop in blood pressure and heart rate, and affects 1 in 100 people (1%). Feeling faint is treated by lowering the head of the bed, or raising your feet, and giving medication (drugs).

Intravenous fluids (fluids given straight into a vein) can increase the heart rate and raise the blood pressure.

Development of an abnormal heart rhythm affects less than 1 in 100 people (<1%). If treatment is needed, an electrical shock to the heart restores its normal rhythm.

Major complications

Some people may experience an allergic reaction to the dye used to show the blocked arteries. Allergic reactions can be treated with medication.

The angiogram may cause damage to a coronary artery, causing it to suddenly narrow or block. This is known as a myocardial infarction (heart attack) and affects less than 1 in 500 people (<0.2%).

Damage to the artery can be treated by:

- inserting a catheter, with a tiny balloon, into the artery and inflating the balloon to open the blockage – this is called an angioplasty
- using another vein or artery as a bypass to re-direct blood around the blocked arteries – this is called a coronary artery bypass operation.

The catheter may cause a small tear in one of the chambers of the heart, in 1 in 1,000 people (0.1%). This can lead to blood collecting around the heart. The blood may need draining, using a small tube inserted below the breastbone, or with an operation.

Damage to the radial or femoral artery, leading to bleeding or blockage of the artery, affects 1 in 1,000 people (0.1%). This would probably need an operation to correct the damage. Very rarely, the lack of blood supply may lead to the loss of a limb.

Less than 1 in 100 people (<1%) have a stroke as a result of having an angiogram. The risk increases with age. Strokes associated with angiograms are usually small and complete recovery is expected.

The dye could affect your kidney function (how your kidneys work), but the risk is very low if your kidney function is normal before your coronary angiogram. If your kidney function is abnormal before your angiogram, we

will give you fluids to protect your kidneys.

In less than 1 in 100 people (<1%) the artery where the catheter was inserted does not heal completely. This can be at the radial artery (wrist) or the femoral artery (groin), depending on where the catheter was inserted. This can lead to a bulging (swelling) in the wall of the artery, called a femoral or radial aneurysm. If you have an aneurysm, you may need an operation to repair it, which means staying in hospital a few more days.

Fewer than 1 in 1,000 people (<0.1%) die during a coronary angiogram, as a result of their heart condition or other complications.


If you have any questions about these risks, please ask your doctor.

Alternative tests

A coronary angiogram is the best way of finding out exactly where the narrowed areas in the coronary arteries are. An angiogram is an essential test if you are going

to have surgical or catheter treatment for your coronary artery disease.

Other tests, such as a perfusion scan, an MRI



(magnetic resonance imaging) scan or an exercise test, can tell us if you have coronary artery disease, but cannot show where and how severe

the narrowed areas are.

If you have any questions about your treatment options, please talk to your doctor.

Female patients

A coronary angiogram uses X-rays that may be harmful to an unborn baby. If you think you may be pregnant, please contact the pre-assessment nurse specialists on **020 7349 7753**.

If you have not had a period in the 10 days before your coronary angiogram, we will carry out a pregnancy test when you come into hospital.

Before your angiogram

You may have a pre-assessment appointment before your angiogram. A nurse specialist will check your health, and do blood tests and MRSA swabs. MRSA is a common infection. If you have MRSA we need to treat it before your angiogram.

If you do not have a pre-assessment appointment, you will have your health checks when you come into hospital.

If you have any questions, please ask your nurse or call the pre-assessment nurse specialists on **020 7349 7753**.

Preparing to come into hospital

Medication

The nurse at your pre-assessment appointment will give you advice on your medication.

Please bring all your medication (including warfarin and metformin) with you to hospital. On the day of your angiogram, you should

take all of your usual morning medication (except warfarin and metformin, see below).

If you have any questions about your medication, please ask your doctor, nurse or pharmacist.

Warfarin

You may need to stop taking warfarin before your angiogram. Please talk to the pre-assessment nurse specialists for advice, on **020 7349 7753**.

Metformin

Please stop taking metformin 48 hours before your angiogram. You should start taking it again 48 hours after your angiogram.

Diuretics (water tablets)

The coronary angiogram may take up to an hour, so you may prefer to stop taking any diuretics (water tablets) on the day of your angiogram.

Eating and drinking

Your confirmation letter has instructions about eating and drinking before your angiogram. Please follow the instructions. At your pre-assessment appointment, your nurse will remind you when

you can eat and drink.

If you do not have a pre-assessment appointment and have questions about eating and drinking, please call the pre-assessment nurse specialists on **020 7349 7753**.

Shaving

Please do not shave or remove hair from your chest, arms, legs or groin before coming into hospital. If needed, shaving will be done in hospital just before your angiogram.

Hygiene

It is extremely important that you have a thorough shower or bath the night before you come into hospital. Please pay special attention to washing under skin folds such as under the breasts, the groin and genital area. We will give you an antiseptic body wash to use the night before and the morning of your admission.



What to bring to hospital

Remember to bring:

- your completed hospital forms
- all your medication
- a dressing gown
- slippers that fit well and have a good grip
- something to read.

Appointment date

If you have any questions about your appointment date, or you need to change the

date, please contact the cardiac bookings team on **020 7352 8121, bleep 1195.**

Bed confirmation

Most angiogram patients are admitted to either York Ward or Paul Wood Ward.

The day before you come into hospital please call the

cardiology bed manager to confirm your bed. If you are coming into hospital on a Monday, or over the weekend, please call on Friday afternoon.

Arrangements for going home

You will need to arrange for someone to take you home after your angiogram, as you will not be able to drive for the first 48 hours.

Arriving at hospital

When you get to hospital, please go to the 5th floor, Sydney Street and report to the nurses' station on your allocated ward.

On the ward

When you get to the ward, a nurse will show you your bed, where you will wait for your angiogram.

Male and female patients may share the same ward, but will have separate bays and bathrooms. There are exceptions; for example, in intensive care and high dependency areas male and

female patients may be cared for in the same bay.

We try to keep waiting times to a minimum, but sometimes there are delays when other patients need to be seen in an emergency. We will keep you informed of any changes.

If you have any questions, please ask the ward manager or matron.

What happens during your angiogram?

You will have your angiogram in a cardiac catheterisation laboratory (cath lab). The angiogram takes about 30 minutes to one hour.

A local anaesthetic is injected in your wrist or groin, to numb the skin. Then a small cut is made, to insert a catheter.

If you feel anxious you can have a sedative. A sedative is a drug that calms you down.


The doctor inserts the catheter into the artery and pushes it gently towards the heart. The doctor watches the catheter on a TV monitor, using a low

dose X-ray. This is called fluoroscopy.

When the catheter reaches your heart, the doctor injects a special dye into the arteries. The dye shows any narrowed areas or blockages in your arteries on the X-ray.

When the dye is injected, you may have a hot flushing sensation for a few seconds. You may also feel an occasional missed or extra heartbeat, but you should not have any pain.

We will take a few X-ray images. The doctor may also



ask you to take a few deep breaths and hold your breath.

If you sometimes get angina (pain in the heart), you may have chest pain during the angiogram, but it should be no worse than usual. If you have new pain or other symptoms, such as shortness of breath, please tell the doctor or nurse.

We will use a heart monitor to check your heart rate and rhythm.

When we have finished taking the X-ray images, the doctor will remove the catheter.

You will have a small wound

in your wrist or groin, where the catheter was removed.

The doctor will apply firm pressure to stop bleeding from the wound.

If your angiogram is carried out through your wrist, the doctor may put a band, called a TR band, on your wound. The TR band is inflated with air, to stop bleeding.

If your angiogram is carried out through your groin, the doctor may use a small plug, called an angioseal, to stop bleeding. The angioseal is made of collagen and is absorbed by the body over 90 days.

After your angiogram

After your angiogram, we will take you back to the ward. You will need to lie in bed for up to four hours. You can have food and drink when you feel ready.

If you have a TR band, the nurses will gradually remove

the air, and then remove the band, and apply a dressing.

The nurses will also monitor your pulse and blood pressure.

You will probably stay in hospital overnight and go home the next day.

Visiting times

Visiting times are 10am–1pm, and 2pm–8pm, on York Ward and Paul Wood Ward. We ask that you only have two visitors at a time.

Your test results

Your cardiologist will look at the X-ray images and may suggest one of the following:

- no further treatment, as your arteries do not have any significant narrowing
- carry on with your current medication
- treatment to widen your coronary artery using coronary angioplasty and/or a stent – please ask for the leaflet ‘Your coronary angioplasty’.
- surgery to redirect blood around the blocked arteries, by using another vein or artery, known as a coronary artery bypass graft – please ask for the leaflet ‘Your heart surgery’.

If you need further treatment, your cardiologist will discuss this with you.

Going home after your angiogram

You will probably go home the day after your angiogram. Before you go home, we will ask you to walk up and down the ward several times to make sure that the wound in your wrist or groin has healed well enough.

You will have a dressing on your wound when you go home. You can take the dressing off the next day.

If you have any questions when you are at home, please contact the pre-assessment nurse specialists. The contact details are at the end of this leaflet.

If you feel you need treatment urgently, please contact your GP, or go to the nearest accident and emergency (A&E) department.



Please remember that Royal Brompton Hospital does not have an A&E department.

Getting back to normal

We will give you a leaflet called 'After your angiogram or angioplasty' that gives more information about your recovery.

Work

It is normal to have a week off work after your angiogram. Please discuss this with your doctor or nurse.

Exercise

Do not do any exercise for two days after your angiogram, while the wound in your wrist or groin is healing.

After two days you can build up exercises gradually, but rest

after exercise and avoid heavy lifting.

You should be back to normal in four to five days. If you have any questions about exercise, please ask your doctor or nurse.

Hygiene and wound care

You may have some bruising and a little tenderness around your wound. Remember to keep your wound clean and

dry. It is OK to have a shower, but do not have a bath for 24 hours after your angiogram.

Driving

You must not drive for 48 hours after your angiogram.

Follow-up

If you need a follow-up appointment or further treatment, we will tell you approximate timings for the appointment before you leave hospital. You will get a letter with the date and time.

Useful contacts

York Ward	020 7351 8592 (24 hours)
Paul Wood Ward	020 7351 8598 (24 hours)
Pre-assessment nurse specialists	020 7349 7753 (Monday–Friday, 10am–4pm)



If you have concerns about any aspect of the service you have received in hospital and feel unable to talk to those people responsible for your care, call the Patient Advice and Liaison Service (PALS) on 020 7349 7715 or email pals@rbht.nhs.uk. This is a confidential service.

Royal Brompton Hospital
Sydney Street
London
SW3 6NP
tel: 020 7352 8121
textphone: (18001) 020 7352 8121

Harefield Hospital
Hill End Road
Harefield
Middlesex
UB9 6JH
tel: 01895 823 737
textphone: (18001) 01895 823 737

Website: www.rbht.nhs.uk

إذا كنت ترغب في الحصول على ترجمة فورية لمضمون هذه الوثيقة إلى اللغة العربية، يرجى منك الاتصال بأحد مستخدمينا بجناح المصلحة التي يتم فيها استشفائك. أحد موظفينا سيسعى لترتيب إجراءات الترجمة وإتمامها في الوقت المناسب لك.

Brosurteki bilginin Türkçe tercumesi için tedavi görüyor olduğunuz bölüme bas vurunuz. Bölüm personeli tercümenin gerçekleşmesini en kısa zamanda ayarlayacaktır.

