

Having a cardiac CT scan

This leaflet aims to answer your questions about having a cardiac (heart) CT scan. It explains what will happen when you have the scan, the benefits, risks and alternatives.

If you have any further questions, please speak to a doctor or other member of staff in the CT department.

What is a cardiac CT scan?

A cardiac CT scan is a specialised scan using x-rays to look at your heart. A cardiac CT scan is also called CT coronary angiography. It can help your cardiologist (heart doctor) find the cause of your heart problem and the best treatment options for you. A cardiac scan is helpful for patients:

- at risk of developing coronary disease
- who have unclear results from other tests, or
- who have had heart bypass surgery to check their grafts.

What should I do before I come for my scan?

Blood test

You should have had a blood test, called an eGFR, to check how well your kidneys are working. Please contact your GP if you have not had this blood test in the last three months.

Beta-blocker tablets

Your heart rate needs to be slower than 63 beats per minute for the scan to take place. Depending on your heart rate, your doctor may give you a three-day course of a medicine called a beta-blocker (or tell you to increase the dose of your current beta-blocker). The beta-blocker tablet will steady your heart rate, and slow it down, ready for the scan. Please take the last tablet of the course on the morning of your scan.

Your consultant will have reviewed your past medical history and the other medications you are taking before prescribing you beta-blockers before the scan. It is important that you have told the doctors about all your previous medical problems, and all medications that you are currently taking (including over the counter, herbal and alternative medicines).

Beta-blockers, like all medicines, have side effects. It is unlikely that you will experience them given the short course that you are taking. Your doctor will be able to discuss these potential side effects, and what to do if they occur.

Women

If you are of childbearing age and have regular periods you must ensure the scan is within 10 days of the first day of your last menstrual period. Please call the department if you need to reschedule your scan, or if you think you may be pregnant.

Men

If you are taking tablets for erectile dysfunction for example Sildenafil (Viagra), Tadalafil (Cialis), Vardenafil (Levitra) or Avanafil (Staxyn) you should stop using these for three days before your scan appointment. Please talk to your GP if you have any questions.

Checklist for the day of your scan

Do not	Drink any products which contain caffeine (for example, tea, coffee or cola) from midnight before the scan
	Take metformin on the day of the scan if you are a tablet controlled diabetic
	Eat three hours before the scan
	Drink one hour before the scan

Do	Take your beta blocker tablet on the morning of the scan, if you were given a prescription
	Have a light breakfast, such as a slice of toast
	Go to the right hospital for your appointment - Guy's Hospital OR St Thomas' Hospital
	Allow yourself enough time to be in the department for 90 minutes
	Bring a list of the medicines you are taking
	Tell us if you have had an allergic reaction to iodine

Many patients come to the appointment with a companion who can travel home with them, but they will not be allowed into the examination room. If you need to bring your children with you, please make sure there is also an adult with you who can supervise them during your scan. We are unable to offer childcare facilities.

What happens during the scan?

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

When you arrive we will introduce ourselves and explain the procedure. We will:

1. Ask you to fill in a short pre-scan checklist and sign the consent form.
2. Ask you to change into a hospital gown.
3. Measure your blood pressure, heart rate and oxygen level (using a clip on your finger).
4. Put a small needle (cannula) into a vein in your arm to give you medicines during the scan.

You will need to lie on a motorised bed. This moves slowly through the 'ring' of the machine as the scan is taken. The scanner is the 'doughnut' shaped scanner and not the tunnel. Four electrodes (small, sticky dots) will be placed on your chest and attached to an

electrocardiograph (ECG) machine. We will help position you on the bed for about 20 minutes and ask you to:

1. Raise your arms above your head and lie very still while each picture is taken.
2. Hold your breath for about 10 to 20 seconds while we take the scan. This is so the picture is not blurry.

An x-ray contrast dye may be injected into the vein, through the cannula in your arm. This may give you a 'hot-flush' and a feeling as though you have 'wet the bed' (but you will not do so). You may also get a metallic taste in your mouth. All of these sensations are perfectly normal and pass within a couple of minutes.

We will try to keep to your appointment time but occasionally we have to scan patients urgently at short notice. We will let you know if your appointment is delayed.

Patients tell us they do not feel claustrophobic because their head is outside of the scanner and not enclosed. If you have any concerns about this, please contact the CT department before your scan.

What happens after the scan?

After the scan we will remove the electrodes and ask you to wait outside the scanner. Please let us know if you feel light headed, dizzy or unwell. We will leave the cannula in your arm and check your blood pressure regularly until we are happy you are well enough to go home.

We advise you eat and drink something before you leave the hospital. You can resume your usual activities straight after the scan.

You will wait in the CT department up to 90 minutes after your scan.

When will I get the results?

You will not get the results on the day.

The pictures taken during the scan are carefully studied by the radiologist or cardiologist. They will email a report to the doctor who referred you for the scan. This can take up to two weeks.

The doctor who referred you may have already arranged to see you after the scan. If they have not, you should allow two weeks from the day of your scan before making a follow-up appointment to discuss the results and any treatment you may need.

What are the risks?

CT scans use radiation. The level of radiation used is very small and the benefits of the scan are believed to outweigh any risks. The contrast dye contains iodine which some people are allergic to. You will be asked to stay in the department after our scan so that we can check for signs of an allergic reaction and treat you if required.

Will I feel any pain?

You should not feel any pain during the scan. The most difficult part is keeping still. Try to relax as much as possible. If you find it uncomfortable to lie still then please tell the radiographer who will help you.

Are there any alternatives?

Your doctor will have discussed the alternatives with you, such as a cardiac angiogram. If you decide against having the cardiac CT scan, please speak to your doctor who referred you. Please call the CT department on the telephone number below to cancel, so we can offer your appointment to someone else.

Contact us

If you have any queries, please call the CT department on 020 7188 5542 (Monday to Friday, 9am to 5pm).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership

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