Cardiac CT

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Why am I having this scan?

Based upon your symptoms, your cardiologist has referred you for a CT scan of your heart and associated blood vessels. This should have been discussed with you at your clinic visit.

What is a CT scan?

CT (computed tomography) is a scan that uses x-rays to obtain detailed images of your body.

The CT scanner is large with a big hole in it, like a ring doughnut. Your body passes through the hole during the scan. The scan itself does not cause any pain or bodily sensations.

Can I take my prescribed medicines as usual?

Yes, you can take all medicines as normal except, the following, which must be stopped:

- 1. If you have diabetes and take Metformin or Glucophage tablets, you should stop taking this medication on the day of your scan appointment. We will provide you with information about this following the scan and when you can restart it.
- 2. If you take medication with the following names: Sildenafil (Viagra), Tadalafil (Cialis), Vardenafil (Levitra), and Avanafil (Staxyn) you will need to **stop taking this 24 hours before your scan.** These drugs are usually taken for erectile dysfunction, or pulmonary hypertension.

You can continue with these medications, as normal, the day following the scan.

If you are on betablockers or have been prescribed them for the scan then it's very important that you continue to take them, up to and including the day of the appointment.

Can I eat and drink normally before the scan?

24 hours before your appointment

We need you to eliminate some foods from your diet for 24 hours before your appointment. It is really important that we do this as these foods can increase your heart rate. In order to obtain good quality scans, we like to have a slower, steady heart rate.

Food and drink to avoid

DO NOT drink caffeine containing drinks e.g. tea, coffee, or cola products for 24 hours before your scan.

Also **avoid** decaffeinated teas as they do contain a small amount of caffeine.

DO NOT eat chocolate for 24 hours before your scan.

Many energy drinks contain caffeine so please read the label carefully and avoid these.

On the day of your appointment

You can eat for up to three hours prior to your scan and drink up to one hour before your scan. Please do not eat the foods listed in the box on page 1.

What should I be doing on the day of the scan?

- ✓ We would request that you allow one to two hours for the scan process from start to finish. It's very important that you allow plenty of time for your journey to the hospital and car parking when you arrive, as we want you to be relaxed and calm before your procedure.
- ✓ Bring a list of the medicines that you are currently taking to your appointment and tell us if you have had a previous allergic reaction to intravenous iodine, or X-ray contrast.
- ✓ Remember to avoid eating the food and drink listed.
- ✓ Please remove any jewellery or piercings from your chest area.
- ✓ You may wish to wear loose clothing that can be easily removed as we will ask you to change into a hospital gown.
- ✓ Remember to continue to take your betablockers or Ivabridine, if you have been prescribed them.

Can I bring a relative or friend to my appointment?

Yes, you can bring a relative or friend but they will not be able to accompany you into the scanning room. At busy times they may be asked to return for you later.

If you need to bring children with you, please make sure there is an adult who can supervise them. We are unable to offer childcare facilities.

Are there any risks with this scan?

CT scanning uses x-rays to create the pictures. We are all exposed to background radiation each day of our lives. This comes from the ground, building materials, the air that we breathe and the food that we eat. Even flying in an aircraft increases our level of exposure. This is normal and natural.

Each medical x-ray gives an additional dose, which varies with the type of examination. Low doses do not cause any immediate harm, but there is a very small increase in the chance of cancer occurring many years or even decades later.

The risks in children are around twice those of middle-aged people from the same examination and much less in the elderly. However, we all have a 1 in 2 chance of getting cancer during our lifetime even if we never have an xray and the risk of missing a serious disorder by not having a CT scan is considerably greater.

Benefits of having a CT include identifying and diagnosing disorders quickly, and guiding treatment such as determining whether surgery is required.

What if I am pregnant?

It is very important that you let the radiographer know if you are, or think you may be, pregnant as the examination may be postponed.

What happens on arrival at the scanner suite?

Upon arrival, in the CT Department, you will be greeted by the CT reception staff. Preparation for the CT scan will take place in another department where you will be asked to change into a hospital gown. The staff will go through a pre-scan checklist with you, prior to beginning your scan, if this has not already been completed in the clinic.

A small tube called a cannula will be placed in one of the veins on your arm. This is used to give you medicines to regulate your heart rate (beta blockers) and also the contrast (clear x-ray dye) that is used during the scan, to show the blood vessels in the heart.

Once in the scan room, the radiographers will attach the temporary heart monitor sticky dots to your chest. They will also explain the procedure and the breathing instructions you will need to follow during the scan. You will have a practice with the breathing before the scan.

How long does the scan take?

Please allow yourself at least one hour for the whole examination to take place.

The actual scan takes less than a few minutes but the preparation beforehand and in the room takes longer.

We will also require you to wait in the department for around 30 minutes after your scan to ensure you are feeling well before you leave.

What happens during the scan?

You will be asked to lie on your back on the scanning table. The table will move in and out of the scanner. You will be asked to hold your breath during the scan. This will be for less than five seconds for most patients. The pictures are then taken in time with your heart rate.

We understand that some people have difficulty holding their breath. Please let us know if you have any breathing problems.

The scanner is not noisy, the procedure should not be painful and the staff can see and hear you throughout the examination.

Will I be given any medicines during the scan?

Yes, you will have two-three different medicines in most cases.

In order to achieve a good quality cardiac CT scan, ideally, your heart rate needs to be close to 60 beats per minute.

If your heart rate is more than 65 beats per minute, a doctor will give you a drug called a beta-blocker through the cannula in your arm to slow this down. This is standard practice and there is nothing to worry about. The drug will gently slow your heart rate. It does not have any major side effects and will act for a short period of time only.

We will spray glyceryl trinitrate (GTN) under your tongue before the scan. This relaxes and widens the blood vessels to enable good views of the ones that supply the heart muscle during the scan. GTN can give you a temporary headache.

You will also need to have an injection of contrast (x-ray dye) into the cannula in your arm during the scan. This will enable the doctors to look at the blood vessels of the heart. This liquid is colourless and will be passed out in your urine within a short space of time.

During the injection you may feel a warm flush all over, get a metallic taste in your mouth or feel like you are wetting yourself. Don't worry, you won't be, it's just a sensation that lasts a few minutes. Many people will feel nothing.

Does the doctor need any other information about me before giving me this medicine? Normally, the doctor in the clinic will have checked if you take any other medication or have any existing allergies prior to referring you for the scan.

It is important that if you have any allergies or have experienced problems when taking beta-blockers previously, that you let us know before your scan - please call us on 01493 453260, at your earliest convenience after receiving your appointment.

Please also inform us if you suffer from severe asthma. Beta blockers are not recommended, in cardiac CT, for patients with severe asthma that has proven difficult to control. It does not prevent the scan, in most cases, but we do need to be aware so we can arrange alternative medication to control heart rate.

The doctor will have also provided us with information about blood test results before the scan.

Are there any risks associated with having this injection of contrast?

Yes, but they are rare. Millions of these injections are given every year with no ill effects.

Mild reactions such as feeling sick and skin hives (nettle rash) occur in approximately one in every 100 patients. Severe reactions are very rare occurring in one in 2,500 patients and very serious reactions may occur in one in 25,000 patients.

If you experience a delayed skin rash or facial swelling, over the following three to four days, then please call in for advice from clinical staff on 01493 453260 (Monday-Friday 9am- 4.30pm) or contact your GP.

Occasionally, a small amount of this liquid will leak into the surrounding tissue in your arm causing bruising, temporary swelling and sometimes discomfort. In the unlikely event of this occurring we will provide you with further instructions to follow.

What happens after the scan?

You can eat and drink as normal. You can normally drive home unless we advise you to try and arrange for someone to pick you up.

When will I get the results?

You will not receive the results on the day. These will be available at your next outpatient appointment. If you do not have another outpatient appointment booked and have not heard anything after three weeks we advise that you contact your consultant's secretary through the hospital main switchboard. The telephone number is **01493 452452**.

If you have any queries about your scan appointment we will happily answer these on the day of your appointment or you can telephone us on 01493 453260. This is the CT scanning reception desk and is manned Monday to Friday 8.15am-8.00pm – at busy times or outside of these hours there will be an answerphone.

Feedback

We want your visit to be as comfortable as possible. Please talk to the person in charge if you have any concerns. If the ward/ department staff are unable to resolve your concern, please ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care. Before you leave the hospital you will be asked to complete a Friends and Family Test feedback card. Providing your feedback is vital in helping to transform NHS services and to support patient choice.

Courtesy and respect

- · A welcoming and positive attitude
- · Polite, friendly and interested in people
- · Value and respect people as individuals So people feel welcome

Attentively kind and helpful

- Look out for dignity, privacy & humanity
- · Attentive, responsive & take time to help
- · Visible presence of staff to provide care So people feel cared for

Responsive communication

- Listen to people & answer their questions
- Keep people clearly informed
- · Involve people So people feel in control

Effective and professional

- · Safe, knowledgeable and reassuring
- Effective care / services from joined up teams
- Organised and timely, looking to improve So people feel safe



The hospital can arrange for an interpreter or person to sign to assist you in TRAN communicating effectively with staff during your stay. Please let us know.

For a large print version of this leaflet, contact PALS 01493 453240