

# CARDIAC CT

## PATIENT INFORMATION LEAFLET

**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**

### What is a Cardiac CT scan?

Computed Tomography, more commonly known as a CT scan, is a diagnostic imaging examination which produces multiple images inside the body.

The CT system uses sophisticated computer analysis to provide detailed 3-dimensional images of your moving heart and major blood vessels, for example coronary arteries.

Obstruction or narrowing of arteries can be identified, blood flow can be observed and fatty deposits (plaques) in the coronary arteries can be detected.

### What should I do before I come for my scan?

#### 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 cardiologist may prescribe 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. If you haven't been prescribed any beta blocker, this can also be administered on the day during your scan.

Beta-blockers, like all medicines, have side effects. It is unlikely that you will experience them given the short course that you are taking but can include feeling tired, light headed or dizzy. Your cardiologist will be able to discuss these potential side effects and what to do if they occur. We will address any medical history, current medications and concerns in our pre scan checklist.

#### X-ray dye (contrast medium)

Very rarely, people experience an allergic reaction to the contrast. Asthmatic patients may experience worsening of their asthma post injection. If you are taking inhaler, please bring these with you. If you have any kidney problems or a known allergy to contrast medium, please let us know. The radiographer will carry out a patient safety checklist before the CT scan.

## Pregnancy & Erectile Dysfunction

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.

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

<b>Do not</b>	<b>Do not drink any products which contain caffeine. No coffee, tea or cola from midnight before the scan</b>
	Take metformin on the day of the scan if you are a tablet controlled diabetic

<b>Do</b>	<b>Take your beta blocker tablet on the morning of the scan, if you were given a prescription</b>
	Have a light breakfast or lunch (if afternoon appointment)
	Allow yourself enough time to be in the department for 60 minutes
	Bring a list of the medicines you are taking
	Tell us if you have had an allergic reaction to iodine Tell us if you think you are pregnant Leave plenty of time to arrive at appointment early (RVH carpark queues can get very busy)

## 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.

- Put a small needle (cannula) into a vein in your arm to give you medicines during the scan.
- A health care assistant (HCA) will record observations such as heart rate and blood pressure (BP) before and after your scan.

You will need to lie on a motorised bed. This moves slowly through the circular opening of the machine called a gantry. The scanner is a 'doughnut' shaped and not a 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:

- Raise your arms above your head and lie very still during the scan.
- Hold your breath for about 10 seconds during scanning. Please note that motion from breathing or body movement may result in blurring of the images.

**Additional Medications and x-ray contrast**

- We will likely administer GTN (Glyceryl trinitrate) via either a spray under the tongue or in tablet form. GTN is used by patients to relieve the symptoms of angina. It does this by making arteries bigger in size allowing blood to flow through arteries faster. The increase in size allows us to image very small coronary arteries better by making them bigger in size. It is a very short acting medication and the effects will wear off by the time you leave the CT department. Occasionally patients may experience a slight headache for a brief period of time.
- We may also administer additional beta blocker medication when you are on the CT table. This is given intravenously by a consultant radiologist supervising the list. This is only required if your heart rate remains higher than is ideal for scanning. It is a fast acting medication which lowers your heart rate temporarily during the CT.
- We will give you an injection of contrast media so that your heart and arteries can be clearly visualised. During the injection you may experience a warm sensation and a metallic taste in your mouth, this is normal.

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.

**What happens after the scan?**

On completion of the examination you will be monitored for 30 minutes for any side effects or reactions to the contrast media such as itching, swelling, rash or difficulty breathing. Otherwise there is no special type of care required.

The venflon will be removed before leaving the department.

## When will I get the results?

Your scan will be interpreted by a Consultant Radiologist and a written report sent to your referring doctor. It is the responsibility of your referring consultant to issue your results. You should receive your results within 4 weeks. If you have concerns regarding results, please contact your referring consultant or referring consultant's secretary.

## What are the risks?

CT scans use radiation. In our modern scanner, the level of radiation used is 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.
- As previously mentioned, additional medications are used to optimise scanning. The pre-CT checklist will determine if it is safe to administer these.
- Most people undergo a cardiac CT scan with no adverse effects.

## What are the benefits?

Many patients can undergo a CT Angiography (CTA) instead of a conventional catheter angiography (catheterisation).

- CTA is faster, non-invasive and has fewer complications.
- CTA is a useful way of detecting arterial heart disease as well as structural abnormalities of the heart.

## 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 angiography (catheterisation). 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.

## Image sharing

Your images will be electronically stored on the hospital picture archiving system. This data can be accessed throughout the Belfast Health and Social Care Trust and other doctors and health care professionals who are directly involved in your care. The ability to share images and radiological reports will improve the safety and quality of your care by ensuring that the right information is available in the right place at the right time.

In order to improve the medical services we provide we may also use your data as anonymously as possible for internal audit and medical education. If you would prefer that your data is not used for these purposes, please inform a member of staff when you attend for your examination.

If your data is to be used for research, then a separate consent process will be used. You will be asked for your consent, should this be the case.

## Contact us

If you have any queries please call the,

CT department on 028 961 50011

Radiology Centralised appointments office on 028 906 33000 (Mon-Fri 9am-5pm)

## Feedback

We hope you found the information in this leaflet helpful. If it did not tell you what you needed to know or you would like to provide any feedback on your experience please let us know so that we can make any necessary improvements.

### ***You can provide feedback on your experience:***

Telephone: **028 9504 8000** (Monday-Friday: 9am-4pm)

Textphone: **18001 028 950 48000**

By email: [compliments@belfasttrust.hscni.net](mailto:compliments@belfasttrust.hscni.net)

By email: [complaints@belfasttrust.hscni.net](mailto:complaints@belfasttrust.hscni.net)

By completing an online form:

<http://www.belfasttrust.hscni.net/contact/FeedbackForm.htm>

## Care Opinion



We invite you to share your experience by clicking the following link:

<https://www.careopinion.org.uk/>



or by scanning the following QR code on your smartphone or tablet:

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## Language and accessible support services

### Deaf/Hard of Hearing

If a Sign Language interpreter is required, please either telephone **028 9615 8900** via the Sign Video remote interpreting service (<https://signvideo.co.uk/deaf-community/>) or email us at [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net) and we will arrange one for your appointment. Please have your H&C number ready when calling or include it in your email. This can be found at the top right corner of any Health and Social Care letters you may have received.

If you are unable to hear on the phone and need to contact us with regards to your appointment you can email us at [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net).

### Do you need this information in another format or language?

The Trust has access to interpreting and translation services. If you need this information in another language or format, including Braille, large print, CD, audio tape please contact the telephone number **028 9615 8900** or e-mail address [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net), and we will do our best to meet your needs.

### Polish - Czy potrzebujesz tych informacji w innym formacie lub języku?

Fundusz ma dostęp do usług w zakresie tłumaczeń ustnych i pisemnych. Jeśli potrzebujesz tych informacji w innym języku lub formacie, w tym w piśmie Braille'a, dużym druku, na płycie CD, kasecie magnetofonowej, skontaktuj się z nami pod numerem telefonu lub adresem e-mail **028 9615 8900** / [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net), a my dołożymy wszelkich starań, aby spełnić Twoje potrzeby.

### Arabic - هل تحتاج هذه المعلومات بصيغة أو بلغة أخرى؟

تستطيع الجمعية توفير خدمات الترجمة الفورية والتحريرية. إذا احتجت هذه المعلومات بلغة أو بصيغة أخرى، بما فيها صيغة برايل Braille أو صيغة بالأحرف الكبيرة، أو في سي دي CD أو في شريط مسموع، يُرجى الاتصال برقم التليفون أو عبر البريد الإلكتروني **028** / [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net) / **9615 8900**، وسوف نبذل قصارى جهدنا في تلبية احتياجاتك.

### Lithuanian - Ar jums reikia šios informacijos kitu formatu ar kalba?

Tarnyba gali suteikti vertimo žodžiu ir raštu paslaugas. Jei reikia šios informacijos kita kalba ar formatu, įskaitant Brailio raštą, didelį šriftą, kompaktinį diską, garso įrašą, skambinkite telefonu arba susisiekite el. paštu [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net) / **028 9615 8900** ir mes padarysime viską, kad patenkintume jūsų poreikius.

### **Romanian - Aveți nevoie de aceste informații într-un alt format sau altă limbă?**

Trustul are acces la servicii de interpretariat și traducere. Dacă aveți nevoie de aceste informații într-o altă limbă sau într-un alt format, inclusiv Braille, tipărire cu caractere de mari dimensiuni, CD, înregistrare audio, atunci vă rugăm să ne contactați la numărul de telefon sau la adresa de e-mail **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**, iar noi vom face tot posibilul pentru satisfacerea necesităților dumneavoastră.

### **Tetum - Ita presiza atu informasaun ida ne'e iha formatu ka lian seluk ka lae?**

Fidusiáriu ida ne'e iha asesu ba servisu durubasa no tradusaun. Se Ita presiza informasaun ida ne'e iha lian ka formatu seluk, inklui letra Braile, letra boot, CD, kasete audio, entaun favór telefone númeru ka enderesu e-mail **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**, no ami sei halo esforsu tomak atu kumpre Ita-nia nesesidade sira.