

General Patient Information – Stress Cardiac MRI

Introduction

You have been referred by your cardiologist to have a Stress Cardiac MRI. This leaflet explains what the examination involves and what to expect when you come to the hospital. It may not answer all your questions, so if you have any queries or concerns, please call the telephone number on your appointment letter.

It is important that you read this leaflet carefully, even if you have had this procedure before.

What is a Stress Cardiac MRI?

A stress cardiac MRI is an MRI scan of your heart where part of the scan will involve an intravenous infusion of a drug called Adenosine that increases the workload of your heart.

How long will it take?

The scan usually takes around 45 to 60 minutes. Please arrive and register at the MRI department, 15 minutes before the scheduled test time.

Preparation for the procedure

For 24 hours preceding your scan, it is essential that you avoid any caffeinated or decaffeinated drinks or medication. This includes:

- Tea/coffee
- Hot chocolate
- Ovaltine or Ovaltine-style drinks
- Horlicks - or Horlicks-style drinks
- Fizzy drinks
- Caffeine-containing painkillers (many pain killers do contain caffeine – please check the label)
- Chocolate or sweets containing caffeine

For 48 hours preceding your scan, it is essential that you do not take any medication, which might affect this test. These include beta-blockers and other drugs:

- Bisoprolol
- Atenolol
- Nebivolol
- Carvedilol
- Propranolol
- Diltiazem
- Verapamil
- Nifedipine
- Ivabradine also known as Procoralan

- Dipyridamole (Persantin/Attia/Ofcram/Asasantin/Molita)
- Theophyllines/Aminophylline (Phyllocontin/Nuelin/Slo-Phyllin/Uniphyllin)

IF THIS PREPARATION IS NOT ADHERED TO WE MAY NOT BE ABLE TO DO YOUR SCAN. WE MIGHT ONLY BE ABLE TO PERFORM PART OF THE SCAN AND YOU MAY HAVE TO RETURN ON ANOTHER DAY FOR THE REMAINDER OF THE SCAN.

What happens during the procedure?

On arrival you will be greeted by the receptionist who will book you in for your appointment. During the scan you will be looked after by a cardiologist and team of MRI radiographers.

Before the scan you will be asked to complete a MRI Safety questionnaire to ensure your safety in the MRI environment. The Radiographer will go through this form with you. The cardiologist will make sure you are suitable to receive administration of adenosine. You will be asked to get changed into a patient gown prior to the examination. The procedure will be thoroughly explained to you. Please feel free to ask any questions to the cardiologist or radiographer at any time.

In the MRI scan room a heart rate monitor will be placed on your chest with ECG stickers. An intravenous line will be placed in your arm. This will allow us to inject contrast and adenosine.

Images will be taken of your heart using the MR scanner to observe how your heart is working. You will be asked to hold your breath throughout the scan – normally for no longer than 20 seconds at a time.

After about ten minutes of scanning a radiographer will come into the scan room and remove you from the scanner; it is at this point the cardiologist will begin the infusion of the drug adenosine through the intravenous line in your arm. This drug affects your heart in a manner similar to exercising. The cardiologist will be monitoring your heart rate, blood pressure and pulse during the infusion of adenosine. The radiographer will also stay with you while the drug is infusing and you can let them know what symptoms you experience.

The infusion of the drug will last for 3 minutes; shortly before the end of the infusion the radiographer will move you back into the scanner so we can image your heart under stress. It is at this point that you will also be injected with a contrast agent/dye. This helps us to see the heart function more clearly. Some more images will be taken during this time.

After stopping the drug, any symptoms you are feeling will leave you within 15-20 seconds. After a short break, more pictures will be taken of the heart and we will complete the rest of the scan.

Are there any risks or side effects associated with a Stress Cardiac MRI?

Adenosine is out of your body in 15-20 seconds. Adenosine can result in atrioventricular block or arrhythmias.

Adenosine should not be given to anyone with asthma. Please inform staff straight away if you are affected.

A team made up of MRI radiographers and a cardiologist will look after you. The cardiologist will be monitoring your heart rate, blood pressure and pulse during the infusion of adenosine.

It is normal to notice your heartbeat speeding up or a feeling of tightness during the adenosine infusion. If you experience any of these side effects during the infusion of adenosine, you can immediately inform the radiographer in the scan room with you and the drug can be stopped immediately. However, the medication will be stopped if you experience severe chest pain, severe shortness of breath or major changes in your heartbeat. These side effects are rare.

MRI radiographers will be continually monitoring you throughout the whole study. They will remain in communication with you throughout the whole procedure.

After your scan

After the test, you will be removed from the MRI machine and the intravenous line will be removed. As long as you feel well, you are free to leave the department. You can resume normal activity, your medication and eat and drink as normal.

When will I get the results?

The radiographer will not be able to tell you the results of the scan. The cardiologist will report on the scan and the report will be sent to your own referring cardiologist.

Asking for your consent

The radiographer will ask you if you are happy for the scan to go ahead. This is called verbal consent. If you do not wish to have the scan or are undecided, please tell the radiographer.

Students/trainees may be present during the examination but only with your verbal consent.

Please remember that you can ask the radiographer any questions you have at any time before, during or after your scan.

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, we will be happy to answer any questions on the day of your MRI scan or you can contact us on the number given on your appointment letter.

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

By email: 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:



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 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.

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, 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**, 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، يرجى الاتصال برقم التليفون أو عبر البريد الإلكتروني **028 9615 MPHAdminFOH@belfasttrust.hscni.net / 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 / **028 9615 8900** ir mes padarysime viską, kad patenkindume 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 Braille, 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.