Cardiology department

Stress echocardiogram

Information for patients, relatives and carers

Introduction

This leaflet explains what will happen when you come to hospital for a stress echocardiogram. We hope it will answer some of the questions that you or those who care for you may have at this time. This leaflet is not meant to replace the discussion between you and your medical team but aims to help you understand more about what is discussed.

Why do I need to have a stress echocardiogram?

This test will assess how well your heart works while under stress. It does this using both an echocardiogram (ultrasound scan of the heart) and a drug which causes your heart to work harder. Pictures of your heart are taken at rest, while stressed, and after stress.



An example of the images captured during the test

How do I prepare for my scan?

We may ask you to stop specific medications e.g. beta blockers and calcium channel blockers, 48 hours before the test.

Risks and side effects

The use of ultrasound is very safe and there are no known significant risks. The drugs may occasionally cause:

- an awareness of your heart beating
- chest pain
- hot flushes
- other symptoms normally associated with exercise e.g. shortness of breath, dizzy spells

The staff doing the procedure will be fully trained in dealing with any issues that may arise.

There is a 1 in 100 chance of an irregular heart rhythm, which usually eases once the infusion is stopped.

There is a 1 in 4000 chance of a serious heart rhythm abnormality, and also of having a heart attack, a stroke and a serious allergic reaction to the medication.

Please ask us if you have any questions about the risks and side effects.

During the scan

An echocardiographer will usually do the scan and a nurse specialist will usually lead it. Once you enter the room, they will confirm that you understand the test and agree to go ahead with it. Please do not hesitate to ask any questions you may have about the test.

- The scan takes place in a private room
- We will give you a hospital gown
- You will lie on a bed for the test
- The nurse/doctor will insert a small needle into a vein in your arm to inject the drugs
- A drug called dobutamine will make your heart pump harder and faster. We will give you
 medicine called SonoVue which helps us see your heart more clearly on the scan. If
 necessary, you may also need a medicine called Atropine which increases your heart
 rate further
- Your blood pressure is monitored all the time and you will have a constant heart tracing (an ECG)
- The medicines are injected into your vein through the needle, and every two to three minutes the concentration of the dobutamine will be increased gradually while pictures are taken
- As the levels of the medicine is increased, you may notice your heart thumping as it
 works harder. You may experience tightening or pain in your chest, arm or neck. If this
 happens, please tell one of the members of staff doing the test, who will keep a close eye
 on you

- When the medicine stimulation has reached the required level, the drug infusion will be stopped. The heart will continue to be monitored and some more pictures may be recorded for a few minutes until everything has returned to normal
- The test lasts about one hour

After the test

We will ask you to wait for a maximum of 15 - 20 minutes in the waiting room before you go home. You can restart your medications after the test.

If you have any further questions, please speak to your care team by calling 020 3312 6198.

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: 020 3312 1337 / 1349

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

Cardiology Published: July 2021 Review date: July 2024 Reference no: 806 © Imperial College Healthcare NHS Trust