

Royal Brompton Hospital

Your stress echocardiogram





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This leaflet gives you general information on your stress echocardiogram. It does not replace the need for personal advice from a healthcare professional. Please ask if you have any questions.

What is a stress echocardiogram (echo)?

An echocardiogram (echo) is a scan that uses ultrasound (sound waves) to produce pictures of the heart. The scan is painless and does not use radioactivity.

During a stress echo we scan your heart before and after you do some moderate exercise. This helps doctors to find the cause of the symptoms you experience during physical stress or exercise. If you are unable to exercise, we will give you some medication, such as dobutamine, through an injection in your arm. Dobutamine increases activity in the heart muscles, making your heart beat harder and faster, similar to when you exercise.

Why do I need this test?


A stress echo helps your doctor understand how your heart copes when it is made to work harder, such as during exercise. It can help your doctor see if:

- symptoms are due to underlying heart disease
- your heart will function (work) better if you have an operation
- there is a serious problem with one of your heart valves.

How is the test carried out?

You will be asked to remove your clothes from the waist up, put on a hospital gown and leave it open at the front. So we can monitor your heart, we attach special stickers (electrodes) to your chest. The stickers are connected to the echo machine by thin wires.

You lie on a couch on your left side. A doctor and an assistant are with you when you have the scan. We take the first echo, called a resting echo.



After the resting echo, we inject a contrast agent (special liquid) through a small, plastic needle into a vein in your arm, ready for the second echo. The contrast helps to give clear pictures of your heart for your consultant to see on the screen.

You will then be asked to walk on a treadmill or pedal an exercise bike. If you are not able to exercise, we will inject some dobutamine into a vein in your arm instead. This makes your heart work in the same way it does during exercise, beating harder and faster. Your doctor will take the second echo when your heart rate is increasing. Your heart rate is monitored during the entire test.

Sometimes your doctor may decide it is better if you have the dobutamine injection, even if you are able to do the exercise. The decision depends on your condition, and your doctor will discuss this with you before the test.

A stress echo takes about 45-60 minutes to complete. The test takes place in a room that is darker than usual so we can see the scan pictures on the screen better.

If you have the dobutamine injection during the test:

- You may notice your heart beating harder and faster, similar to when you are exercising. You may feel warm.
- We stop the injection once your heart is working hard enough.
- We continue to monitor your heart until the effects of the medicine have disappeared. This usually takes only a few minutes.
- You may feel slightly sick or dizzy from the injection, but this goes away quickly after we stop the injection.
- Please let your doctor know of any other side effects, or discomfort, you experience during the test. Your doctor will take care of any side effects, if needed.

How do I prepare for the test?

Medicine

It is important that you stop taking any beta-blocker medication (atenolol, bisoprolol, metoprolol, propranolol, nebivolol and carvedilol), calcium-channel blocker medication (diltiazem and verapamil), or the angina drug ivabradine, 48 hours before the test.

These drugs prevent the stress medicine from making your heart work harder. If you continue taking these medications in the 48 hours before the test, your stress echo may need to be moved to a later date.

You should continue taking all your other medication as prescribed by your doctor. If you have any questions about your medication, please contact your doctor, or the echo department on **0330 128 8209**.

Caffeine

You should not have any caffeine products 24 hours before your examination as they may interfere with your test – this includes tea, coffee, green tea, cola and energy drinks. Caffeine can also be found in both hot chocolate drinks and chocolate bars.

What happens after the test?

Arranging transport for after your test

After the stress echo, we may ask you to sit and rest for around 20 minutes to allow the effects of exercise, or the medication, to completely disappear. You can go home after this.

We advise you not to drive after the test, so please ask a friend or relative to drive you home. Please be aware that you should not drive or operate machinery for the rest of the day. You will be well enough to travel on public transport.



What are the risks of having the test?

All medical procedures carry some risk. It is important to remember that we would not recommend any procedure if we did not believe the benefits outweigh any risk. The risks will be different for each patient, so we will discuss the risks that apply to you in more detail before the procedure.

A stress echo is very safe, but there are some risks you need to be aware of:

- The heart may develop an abnormal rhythm in 0.1 per cent of patients (one in 1,000) having this test. This usually settles down without the need for any treatment. If treatment is needed, a short electrical impulse to the relevant area restores the heart's normal rhythm.
- A bad angina attack or heart attack may happen in less than 0.05 per cent of patients (one in 2,000) during the test.
- The medicines used may cause an allergic reaction in less than 0.01 per cent of patients (one in 10,000) during the test. If you have had allergic reactions to any medicine before, please tell your doctor before the test.

Is there anything else I need to know?

If you need help or want someone with you during the scan, you can bring a friend or relative. Or you can ask us in advance to provide someone to help you.

Cancellations

If you are unable to come to your appointment, please contact the echo department on **0330 128 8209** as soon as possible. We can give your appointment time to another patient, and arrange a new time for you.

Where can I get more information?

If you have any questions, please contact the echo department on **0330 128 8209**.

You can also discuss any questions with your consultant when you arrive in the echo department on the day of your scan.

If you have concerns about any aspect of the service you have received in hospital and feel unable to talk to those people responsible for your care, call the Patient Advice and Liaison Service (PALS) on 020 7349 7715 or email pals@rbht.nhs.uk. This is a confidential service.

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إذا كنت ترغب في الحصول على ترجمة فورية لمضمون هذه الوثيقة إلى اللغة العربية، يرجى منك الاتصال بأحد مستخدمينا بجناح المصلحة التي يتم فيها استشفائك. أحد موظفينا سيسعى لترتيب إجراءات الترجمة وإتمامها في الوقت المناسب لك.

Brosurteki bilginin Türkçe tercumesi için tedavi görüyor olduğunuz bölüme bas vurunuz. Bölüm personeli tercümenin gerçekleşmesini en kısa zamanda ayarlayacaktır.

