

Ultrasound enhanced agent echocardiography

What is it?

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

During the scan, an Ultrasound enhanced agent (UEA) is injected which improves the quality of the images that are being recorded.

What is it being done?

If your Doctor has decided that you need an Echocardiogram, but the picture quality is not very good, a UEA can be used to help improve the images.

What does it involve?

- You will be taken into a darkened room. One or two people will usually be present. The person performing the test is called an Echocardiographer. The Echocardiographer will usually NOT be a doctor. This means that some questions you may have about the result will be discussed when you next see your doctor in clinic.
- You will be asked to undress to the waist and put on a gown that should be left open on the front. You will be asked to lie on a couch on your left hand side.
- Stickers will be attached to your chest and connected to the machine. These will be used to monitor your heart rate during the test.
- A doctor or trained highly specialised cardiac physiologist will insert a cannula (small, thin plastic tube) into a vein in your arm. This will be flushed through with saline (salty water) which will cause no harm but you may feel a 'cold rush' up your arm.
- The Echocardiographer will record a number of pictures of your heart. Whilst this is happening, a UEA will be injected into the cannula to improve the quality of the images.
- The echocardiogram will take approximately 30–40 minutes to complete.

Are there any special precautions that I need to take before the echocardiogram?

No. You can take all your medication as normal. You can eat and drink as normal.

What happens at the end of your echocardiogram?

Once the echocardiogram is complete, you will be asked to wait for 30minutes in the department as a precaution before we remove the cannula. Afterwards you can get dressed and leave. There are no limitations to what you can do after the scan. Activities like driving will be fine.

Information for Patients

Are there any risks in having the ultrasound enhancing agent echo?

There is an extremely small risk (less than 1 in 10,000) of developing a severe allergic reaction to the UEA used.

If you have had allergic reactions to any medicines before please inform us before starting the test.

What is the alternative to having the ultrasound enhancing agent echo?

An alternative to this test is cardiac magnetic resonance imaging with contrast. This takes longer, is more expensive and cannot be performed in patients with cardiac devices or renal impairment.

Research and Audit

University Hospitals Birmingham NHS Foundation Trust is an organisation involved in teaching and research. Some of the data collected during your scan may be used for audit purposes to check on the quality of what we do and also to support research projects that do not involve further contact with you. If you do not wish us to use this data, please let us know when you arrive for your appointment.

If you have any questions regarding the procedure please contact the department and give your contact details which will be forwarded to our clinical lead.

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email interpreting.service@uhb.nhs.uk