Adult congenital heart service
Bubble saline contrast echocardiogram

A bubble saline contrast echocardiogram is a test often performed as part of a patent foramen ovale (PFO) clinic review.

A PFO is a normal flap valve opening that occurs in the wall (atrial septum) of the heart. It separates the right atrium from the left atrium (the top two heart chambers) while in the womb but usually closes spontaneously (naturally) following birth. In a quarter of people however it stays open and can intermittently allow blood flow to pass from the right atrium to the left atrium.

Before the test

• Take all your normal medication (if you have a repeat prescription of your medications, please bring it with you).
• Eat and drink as normal.

The day of the test

Please report to non-invasive cardiology reception as detailed in your appointment letter. You will be directed to a waiting area before being called through for your test. You will meet your sonographer (ultrasound/scan specialist) and doctor who will explain the test in more detail to ensure any further questions you may have are answered.

The procedure

You will be supplied with a hospital gown, asked to undress to the waist and then to lie on a couch. The doctor or sonographer will insert a thin, plastic tube (a cannula) into a vein in your left arm.

You may already have had an echocardiogram performed. This is a safe, non-invasive procedure that uses ultrasound waves to see the heart. A bubble saline contrast echocardiogram is similar but during this procedure a small sample of your blood will be mixed with a saline solution (sterile salty water) and injected through the thin plastic tube in your arm. You may be asked to hold your breath for a few seconds during the test. The injections will be repeated several times and the whole procedure will last approximately 30 to 40 minutes.

This procedure gives much clearer images of the heart as the saline solution helps enhance the quality of the pictures.

These images will be recorded on the machine and reviewed by your doctor.

After the procedure

Following the test your doctor will have a discussion with you about the test results.
Possible complications

The procedure is very safe and complications are rare. You do not have to take any precautions following the test and driving is permitted afterwards.

Alternative reasons to perform this test may include:

- extra communications (small holes) between blood vessels in your lungs (known as pulmonary arterio-venous malformations)
- history of complex heart surgery

How to contact us
Contact details for the department can be found on the appointment letter or the hospital website www.uhs.nhs.uk

Useful links
NHS Choices
www.nhs.uk/conditions/Congenital-heart-disease/Pages/Introduction.aspx

If you need a translation of this document, an interpreter or a version in large print, Braille or on audio tape, please telephone 023 8120 4688 for help.

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