

# Bubble study (agitated saline contrast study)

Your doctor has recommended you undergo a test called a bubble study, which is also known as an agitated saline contrast study.

You might not have heard of this medical term before now and may be feeling unsure about the nature of the test.

This information sheet outlines what the test involves.

After you read this information sheet, you might still have questions. If you do, please contact our team. We're here to help.

## 1. What's a bubble study?

A bubble saline contrast echocardiogram is a test often performed to detect a patent foramen ovale (PFO). A PFO is a normal flap valve opening in the atrial septum wall of the heart. You can find a separate information sheet about PFO, but in essence it separates the right atrium from the left atrium (the top two heart chambers) while in the womb but usually closes 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.

Even though PFO detection is the most common reason why a bubble test is undertaken, some other reasons are:

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

## 2. How does it work?

Before your bubble test you should take all your prescribed medications and eat and drink as normal.

When you come in, a cardiac sonographer or your cardiologist will explain the test to you and answer any questions you have.

As we need to access your chest, you will be asked to undress to the waist and then to lie on a bed. If you haven't already had a resting echocardiogram performed, you will have one now. This is a very simple, safe and non-invasive test that uses ultrasound to see the heart.

The bubble test will start with your doctor inserting a thin, plastic tube (a cannula) into a vein in your left arm.

A small sample of your blood will be mixed with a saline solution (sterile salty water) and injected through the cannula. You may be asked to hold your breath for a few seconds during the test. The injections of the blood and saline mix will be repeated several times and the whole procedure will last for 30–40 minutes.

This procedure gives much clearer images of the heart because the saline solution enhances the quality of the pictures. These images will be recorded on the machine and reviewed by your doctor.

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

### Our commitment to you

As a patient of Oceanside Cardiology, you can be assured we will always strive to act in your best interests and we will only recommend tests & procedures we believe will benefit you.

Everyone has questions, and we want to answer yours. Please contact your doctor to discuss any concerns you might have.

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