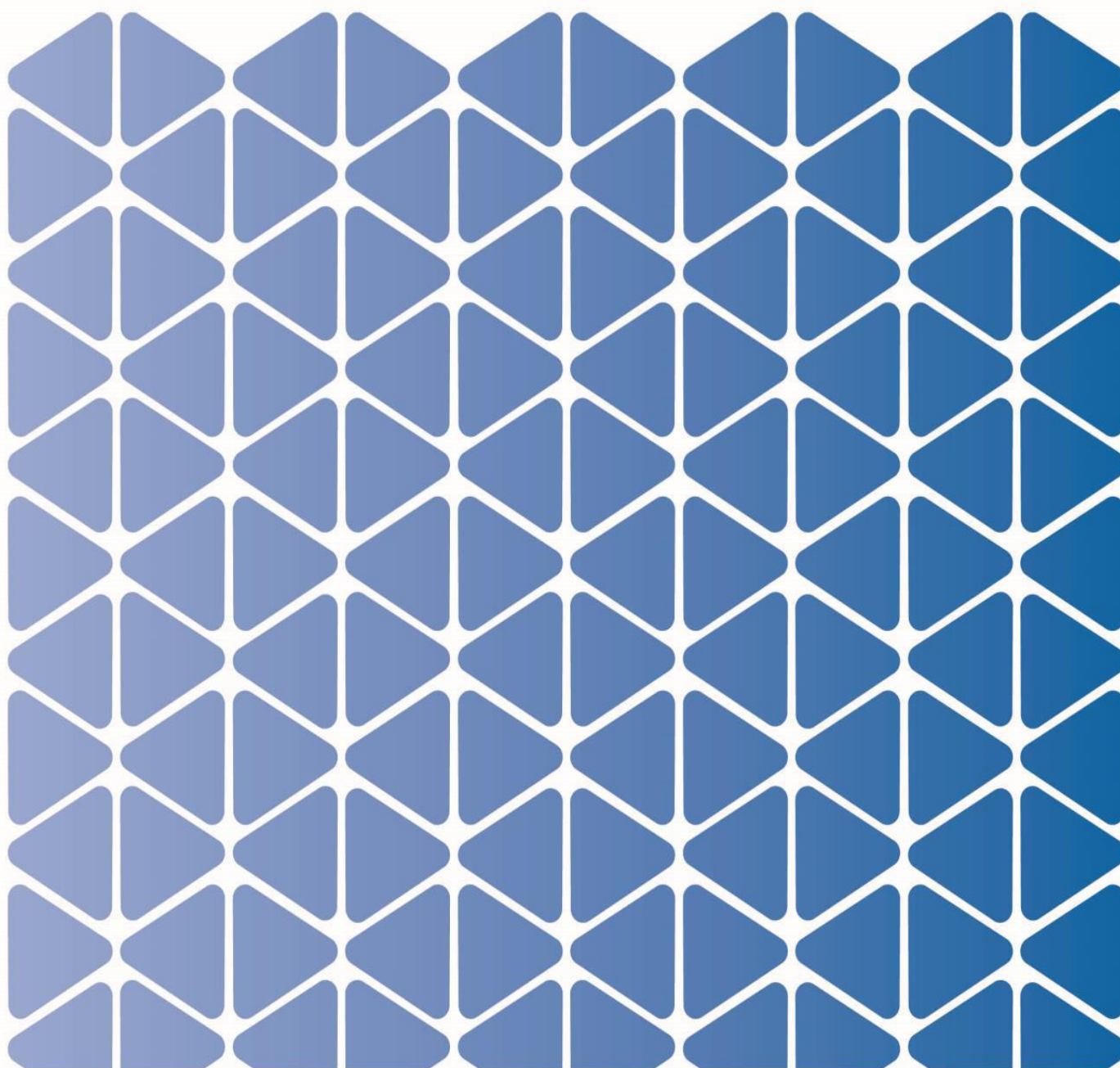


# CONTRAST ECHOCARDIOGRAPHY



## **Introduction**

This leaflet will give you information about your planned contrast echocardiogram.

## **What is a contrast echocardiogram?**

You may have already had an echocardiogram (sometimes just called 'echo') performed. This is a non-invasive imaging test using ultrasound to look at your heart. Ultrasound is very high-frequency sound which cannot be heard by the human ear. It is used to gain information regarding the structure and function of the heart muscles, chambers of the heart and structures within the heart such as the valves. The test is safe and painless.

A contrast echocardiogram involves taking the same pictures, combined with an injection of specialist ultrasound enhancing agent to improve the quality of the images that are recorded.

## **Why am I being asked to come for this test?**

Your doctor has decided that you need an echocardiogram but they would like more detailed images. An ultrasound enhancing agent (called SonoVue®) is used to help improve the image quality.

## **What does the 'contrast echo' involve?**

- You will be taken into a room with usually a doctor and a sonographer.
- You will be asked to undress to the waist but you will be offered a hospital gown to wear. The gown should be left open to the front (like a coat). You will be asked to lie on a couch and ECG stickers will be attached to your chest and connected to the echocardiogram machine. This will monitor your heart rate and rhythm during the test.
- You will have a small plastic tube (cannula) inserted into one of the veins in your arm. This will be used for the injection of the ultrasound enhancing agent.
- You will then be asked to lie on your left hand side. If you are unable to lie on your left side, we can carry out the echo while you are lying on your back. The test is performed in semi-darkness so the lights will be dimmed once you are comfortable.
- The sonographer will place the echocardiogram probe on your chest (this is like a thick blunt pen) and cold lubricating jelly (this helps to get good contact with the skin).
- While the sonographer is taking a few baseline pictures of your heart, the doctor will be mixing up the ultrasound enhancing agent. Once this is done the doctor will inject the contrast through the cannula into the vein and the sonographer will take a number of pictures of the heart from different areas on the chest. More contrast may be injected during the scan to keep good image quality.

- The doctor and sonographer may discuss the images during the test to make sure that they are happy and that they have enough information before deciding that the test is at an end.
- The test will take approximately 30 minutes to complete.

### **Do I need to take any special precautions before the test?**

You should take all of your usual medication as normal on the day of the test. You can also eat and drink normally. We advise that you keep hydrated (having plenty to drink) and warm before the test. This increases the chance that we can access a vein for the cannula insertion during the test.

### **Risks, contra-indications and side effects**

SonoVue® is contraindicated (cannot be used):

- If you are allergic to sulphur hexafluoride, macrogol 4000, distearoylphosphatidylcholine, dipalmitoyl-phosphatidylglycerol sodium or palmitic acid.
- If you have been told you have a right-to-left heart shunt.
- If you have severe pulmonary hypertension (pulmonary artery pressure >90mmHg).
- If you have adult respiratory distress syndrome (a severe, medical condition characterized by widespread inflammation in the lungs).
- Please let us know if you are pregnant, as the test should not be carried out until after the birth of your baby. If you are breastfeeding, you can resume after 2 or 3 hours as the ultrasound enhancing agent is quickly removed from the body by breathing.

SonoVue® is considered a medicine, and like all medicines it can cause side effects, although not everybody will get them. Most of the side effects to SonoVue are rare and usually not serious. However, some patients may experience serious side effects and may require treatment.

### **If you have had allergic reactions to any medicines before, please let us know before starting the test**

**Tell your doctor straight away** if you notice any of the following side effects, as you may need medical treatment:

- Swelling of the face, lips, mouth or throat which may make it difficult to swallow or breathe; skin rash; hives; swelling of the hands, feet or ankles.
- More commonly you may experience a headache; feeling sick (nausea) or abdominal pain; flushing or feeling hot or sensations of dizziness during the injection. Occasionally there may be a localised skin reaction at the injection site.

- Less common/rare side effects include blurred vision; a decrease in blood pressure which may lead to feeling faint; itching (pruritus); back or chest pain; generalised pain or fatigue and allergic reactions (may include redness of the skin, decreasing heart rate or blood pressure, shortness of breath or difficulty breathing, dizziness or loss of consciousness, cardiac/cardio-respiratory arrest).
- Please inform us if you have a heart condition which has recently worsened, including increasing frequency of angina chest pains or rhythm disturbance or if you have artificial heart valves. We also need to know if you have an acute general inflammation or infection and if you have any severe liver or kidney disease.
- If you are taking any blood thinning medication, you may bleed or bruise more easily when the cannula is removed.

### **After the procedure**

You may be given the results immediately, but some findings take longer to interpret and may need a second opinion. You can carry on with your normal activities after the procedure. You can drive as normal and operate machinery following the test.

### **Contact information**

If you have any questions about your planned contrast echocardiogram, please contact your consultant's secretary or:

### **Cardiology Investigations Department**

01905 763333

### **Further information**

#### **Patient**

Website: [www.patient.co.uk/health/echocardiogram](http://www.patient.co.uk/health/echocardiogram)

**If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.**

### **Patient Experience**

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

### **Feedback**

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

### **Patient Advice and Liaison Service (PALS)**

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

### **How to contact PALS:**

**Telephone Patient Services: 0300 123 1732 or via email at: [wah-tr.PALS@nhs.net](mailto:wah-tr.PALS@nhs.net)**

### **Opening times:**

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.