

Cardiac Physiology Clinical Unit

Echocardiogram

Information for patients



This information sheet tells you about the different heart scan procedures that are grouped under the title 'Echocardiogram'. If you have any questions you may contact this department before the procedure on Oxford (01865) 220258, or ask a member of staff in the Cardiac Physiology Unit at the time of your appointment. Organisations such as the British Heart Foundation have leaflets and information about heart investigations and heart conditions on their website (www.bhf.org.uk, or telephone 08450 708070) that you may find helpful.

What is an echocardiogram?

An echocardiogram uses ultrasound (sound beyond our normal range of hearing) to produce pictures of moving heart structures and blood flow.

These pictures can tell us the size of various heart chambers, how well the heart is pumping, and whether there are problems with the heart valves. They can also tell us about any other structural abnormalities and the speed and direction of blood flow within the heart and major blood vessels.

The procedure is carried out by a professionally trained clinical physiologist or specialist heart doctor (cardiologist). It is quite painless and there are no side-effects or risks from the sound energy used.

What happens during the echocardiogram

The echocardiogram will take place in a darkened room to help us to see clearly pictures of your heart on a screen. To enable the ultrasound to penetrate the chest it is necessary for you to undress to the waist. You will usually be asked to lie on your left side during the procedure, as this position usually provides the best views of the heart.

The operator will hold a device, which is coated in a harmless gel, directly and quite firmly against several positions on the chest surface.

You will not feel the sound energy but you may hear the machine produce swishing noises. These noises represent blood flow through the heart and help the operator to get the best pictures. The pictures

of your heart are assessed on the screen.

It is not possible to tell you in advance whether your echocardiogram will be carried out by a male or female operator. However, you may bring a friend or family member with you who may stay with you during the procedure. If this is not possible, or there are other

personal issues that we should consider, please ask to discuss these in confidence on arrival. Every effort will be made to accommodate your needs. If you would prefer another staff member chaperone to be present then please advise the department at least one week in advance.



What happens afterwards

A specialist clinical physiologist or cardiac doctor will look at the ultrasound pictures of your heart to assist in the diagnosis of your condition and possibly to plan new treatment or adjust existing arrangements. The results of the echocardiogram will be given to you in one of two ways: (1) by the hospital doctor that requested the procedure, or (2) by your local GP. The arrangement and timing will depend on information given to you at the time of your visit to the hospital doctor.

Different types of echocardiogram

There are a number of different kinds of echocardiographic procedure. The one described above is a **Transthoracic echocardiogram** and is the one you are booked to have. Others are described below.

- **Stress echocardiogram**

This is similar to the echocardiogram described above but during the procedure a drug is given into a vein in your arm to make the heart work harder (beat faster). Occasionally it is not possible to encourage the heart to work harder in this way and it may be

necessary for you to do some controlled physical exercise on a stationary bicycle or walking treadmill during the procedure. If you have an appointment for a stress echocardiogram we will give you a separate information sheet.

- **Transoesophageal echocardiogram**

This procedure is rather different. Pictures of your heart and blood flow are obtained by passing a probe through the oesophagus (food pipe). Patients are usually sedated. If your doctor has requested that you have a transoesophageal echocardiogram you will receive an additional information sheet before your appointment.

- **Other heart imaging investigations**

Alternative methods of taking pictures of the structure of the heart and blood flow are generally more complex to undertake. This may be necessary if echocardiography is unable to provide a complete diagnosis, or if we need further information. If this is necessary for you we will discuss it with you during a hospital visit and will give you further specific information about the tests or investigations.

Questions or concerns

If you have any questions or concerns before your procedure, please telephone:

Oxford: **(01865) 857814**

Horton General Hospital: **01295 229099**

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473**. When we receive your call we may transfer you to an interpreter. This can take some time, so please be patient.