

Transoesophageal Echocardiogram (TOE)

This information sheet provides information about your forthcoming transoesophageal echo (TOE) investigation so that you know exactly what to expect.

What is a TOE?

A transoesophageal echocardiogram (TOE) is an ultrasound scan which looks at the structure and function of your heart. A standard echocardiogram (also known as a transthoracic echocardiogram) uses a probe on the outside of the chest to take ultrasound pictures of your heart.

For a TOE, the ultrasound probe is on the end of a flexible tube which is inserted through the mouth and into your oesophagus (the tube that goes from your mouth to your stomach). A TOE gives more detailed pictures than a standard echocardiogram as the probe is much closer to your heart and there is no interference from the lungs or the ribs.

Why would I need this procedure?

A TOE may be suggested by your doctor as it gives detailed images of the heart. It is particularly useful to look at the heart valves, to look for holes in the heart or evidence of infection. A TOE may also be performed to look for blood clots inside the heart prior to a cardioversion procedure for an irregular heart rhythm.

What are the alternatives?

Your doctor will have recommended that this is the most appropriate investigation for your condition. If you wish to discuss alternatives, please talk to your doctor before you sign a consent form.

What are the expected benefits of a TOE?

The detailed pictures of your heart obtained from a TOE will give more information about how your heart is working and help your doctor decide on whether you need treatment, and which treatment options would be best for you; for example, whether a leaking heart valve needs to be treated and whether it can be repaired or needs to be replaced.

What are the potential side effects and complications?

The TOE procedure is very safe. You may have a sore throat for a day or two after a TOE. Occasionally your throat may also bleed a little, but this isn't common.

Serious complications are very rare but include:

- Aspiration (inhaling the contents of your stomach) – this shouldn't happen if you do not eat and drink before the procedure
- Damage to teeth. This is rare as the mouth guard helps to protect the teeth
- Bleeding
- A very small risk of damage to the oesophagus or a perforation (tear) of the oesophagus, which may require an operation to repair (<1 in 10,000 cases)

The day of the procedure

If you feel unwell on the day of your procedure contact the Coronary Care Unit (CCU) prior to attending.

Please bring **all** your medication, slippers/flip flops and something to read with you on the day. Although your investigation is a day case, we advise you to bring an overnight bag just in case.

On the day of your investigation you should not have anything to eat or drink (including water) for six hours prior to your admission.

Unless advised otherwise, you can take any medication you would normally take first thing in the morning with a small sip of water.

During the test you will be given sedation so it is important that you arrange in advance for a friend or relative to collect you from hospital.

What happens when I arrive?

Please arrive at the CCU at the time specified on your letter and use the doorbell to let staff know you have arrived. We will show you to your bed in Recovery; please note this may be a mixed sex area. You will be asked to change into a hospital gown.

Your nurse may perform an electrocardiogram (ECG) and a small tube (cannula) will be inserted into vein in your arm so that we can give you sedation during the TOE procedure to make you feel relaxed and sleepy. We may take some bloods from you if required. The nurse will take your physical observations including blood pressure, oxygen saturations, temperature and ask you some questions.

A doctor will come and ask you some questions and may perform a brief examination. If you have any concerns, please do not hesitate to ask, as we would like you to be as relaxed as possible during the procedure. We will be happy to answer any queries you may have.

You may have to wait some time before the test is performed so your patience is appreciated.

Consent

Before a doctor examines or treats you, they need your consent. You will be asked to sign a consent form which we will keep in your records. Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your cardiology team.

What happens during a TOE?

The procedure takes place in a treatment room and you will be taken there on your bed. The procedure is carried out by a doctor, and a nurse will be present to help with the procedure and make sure you are comfortable. Your blood pressure, oxygen saturations and breathing will be monitored throughout.

The doctor will briefly explain the procedure again. They will then spray the back of your throat with some local anaesthetic; this has a flavour similar to bitter bananas.

A mouth guard will be placed between your teeth. This is to protect the TOE probe as well as your teeth. You will be asked to turn onto your left side and the main light in the room will be

turned off. You will then be given the sedation medicine into the cannula in your arm. When this has taken effect the TOE probe will be inserted into your mouth and you will be asked to swallow to help pass it into the oesophagus. The procedure isn't painful but it may feel uncomfortable as the probe is passed down the back of your throat. Once in position, the probe will be moved around slightly to take pictures of your heart.

When the probe is in your mouth you may be aware of it, depending on how drowsy you are. Try to breathe gently through your nose, and don't try to talk. You may find your mouth water and this is normal and nothing to be embarrassed about. The nurse may gently use suction to clear secretions.

The procedure usually takes 25-30 mins. Once complete, the probe will be quickly and easily removed.

What happens after the TOE?

You will be taken back to the Recovery area and will need to remain on bed rest until your nurse advises you that you can mobilise. The sedation has an amnesic effect so you may remember little of the procedure after the sedation wears off. The effects of the sedation can last a few hours. Although you will usually be awake and talking within an hour, you may not remember what you were talking about. This is temporary.

Your breathing and blood pressure will be monitored by your recovery nurse. You may need to wear an oxygen mask while the sedation wears off.

After one hour the anaesthetic in your throat will have worn off and you will be offered something to eat and drink.

How long will I be in hospital?

You will be discharged the same day once it is safe to do so. As you have had sedation, you cannot drive yourself home. You will need to arrange for someone to accompany you home by car or taxi. Ideally you should ask someone responsible to stay with you for the next 24 hours, as you recover from the sedation.

Your throat may feel a little sore for the next day or so, this is normal and will resolve itself. Please take over the counter pain relief if required.

The sedation may temporarily impair your judgement so it is important that you do not drink alcohol, undertake exercise, drive, sign any legal documents, work or handle machinery for 24 hours. You can resume normal activities after this if you feel well enough to do so.

Before going home you will be given a copy of a letter sent to your GP with information about your procedure and any changes of medication. You will also receive information of advice regarding post procedure care. We will explain any discharge advice, medication changes and answer any questions you may have. You will receive an appointment for follow up as an outpatient with the cardiology team where we will discuss the results of your investigation.

Sources of information

Coronary Care Unit Eastbourne: 0300 13 14 500 Ext: 136634

Coronary Care Unit Conquest: 0300 131 5079/5080

British Heart Foundation- www.bhf.org.uk

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 (direct dial) or by email at: esh-tr.patientexperience@nhs.net.

Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 0300 131 4434 Email: esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

The following clinicians have been consulted and agreed this patient information:

Professor N Patel, Clinical Lead
Dr A Marshall, Consultant Cardiologist
Dr P Spanos, Consultant Cardiologist
Dr R Veasey, Consultant Cardiologist
Dr S Furniss, Consultant Cardiologist

The Clinical Specialty/Unit that have agreed this patient information leaflet: Coronary Care Unit.

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Responsible clinician/author: Amy Pennells, Staff Nurse Coronary Care Unit

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