



## What is a TOE?

A trans-oesophageal echocardiogram (also called TOE or echo) is a procedure that uses ultrasound to scan the heart closely without other organs obstructing the view. A long flexible tube is placed down your oesophagus to produce moving images of your heart. The tube is connected to a monitor so that images can be seen by the doctor. It does not use radioactivity.

## What are the benefits of the test?

A TOE helps the doctor determine the causes for any cardiac symptoms you may have and decide if you need any further procedures or treatments. It provides clearer, more detailed images than a trans-thoracic echo (TTE) which visualizes the heart through the skin and is obstructed by the ribcage and other organs. A TOE provides extremely detailed images of the valves and other structure of the heart. It can be performed as an outpatient or inpatient.

## What are the risks?

Your doctor will discuss the risks of the procedure with you before you sign the consent form.

The procedure is very safe and serious complications are rare - overall risk of death is 1 in 10 000. A sore throat is common but typically resolves within a day or two. Occasionally the throat may bruise or bleed slightly.

Other complications include allergic reactions to the equipment, medication, or materials (1 in 7000), infection (less than 1 in

## Contact Details

### For more information please contact:

- The Cardiology Department: **01932 722530**  
(Monday - Friday 9am-5pm)

### For more information, the following websites are recommended:

- British Heart Foundation: [www.bhf.org.uk](http://www.bhf.org.uk)
- British Cardiac Society: [www.bcs.org.uk](http://www.bcs.org.uk)

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## Further Information

We endeavor to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Manager or Cardiac Physiologist/s on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email [asp-tr.patient.advice@nhs.net](mailto:asp-tr.patient.advice@nhs.net). If you remain concerned, the team can also advise upon how to make a formal complaint.

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You may be given oxygen until the sedation wears off which may take up to an hour.

When you are able, you may get dressed. Your doctor will discuss the results of your investigation with you before you go home.

**If you have been given sedation you should NOT drive or operate heavy machinery for the remainder of the day. A responsible adult must take you home and remain with you for 6 hours after the test. Remain near a telephone in case of an emergency for 24 hours.** You should be able to return to work / normal activities the following day.

Once home, if you get chest pain, back pain, breathing difficulties, abdomen pains, a high temperature, or vomiting, contact the Cardiac unit or your GP. In an emergency call an ambulance or go immediately to your nearest Emergency Department.

***You must not drive any vehicle, ride a bicycle, travel on public transport, operate machinery, or drink alcohol for at least 24 hours after the test.***

5000), breathing difficulties as a result of the sedative (8 in 1000), damage to teeth or bridgework (3 in 10 000), making a hole in your oesophagus or stomach (1 in 10 000), bleeding from damage caused by the scope (1 in 100) – this is usually self-resolving but can be serious and require an operation in extreme circumstances (3 in 10 000).

## **What are the alternatives?**

Your doctor will recommend a TOE if they feel that benefits of the test outweigh the risks. Risks quoted in this document are average figures – your doctor will discuss specific risks that relate to you on the day of the test.

If you wish to discuss any alternative test please talk to the doctor before you sign the consent form.

## **How do I prepare for the test?**

You should not eat or drink fluids for six hours prior to the test. Your stomach needs to be empty to provide clear images on the scan as well as making the procedure more comfortable and ensure you do not inhale stomach contents during the procedure.

Please inform the doctor if you have any problems with swallowing or have had bleeding from your stomach – the procedure may not be able to go ahead in these cases.

Unless instructed otherwise by your doctor, you should continue to take your medications on the morning of the procedure with a small sip of water.

The healthcare team will carry out a number of checks to make sure you are having the correct procedure; please ensure your personal details are correct on any paperwork you get given.

Please inform the team if you are diabetic or have any allergies to medications and metals / latex as soon as possible. Please bring a copy of your prescription with you. If you are on Warfarin, your INR should have been checked within the preceding 7-days.

Your doctor will explain the procedure and associated risks and benefits to you before asking you to sign the consent form.

**You MUST be accompanied by a friend or family member / carer to take you home and be with you for 6 hours after the test.**

## **What does the test involve?**

***Please ask a member of staff if you require a chaperone during your appointment.***

A small tube (cannula) will be inserted into an arm vein so sedation can be given. You will be awake for the procedure but feel relaxed and sleepy.

The TOE will take place in a treatment room with the Doctor and an assistant. You will be required to remove your dentures (if applicable). You will be asked to remove your clothes to your waist and put on a hospital gown (if required). Three sticky electrodes will be attached to your chest to monitor your heart rhythm. A small monitor will be placed on your finger to measure your oxygen levels, and a blood pressure cuff will be attached to your arm.

The doctor will explain the investigation again before asking you to remove any false teeth or plates, and will then spray your throat with **local anesthetic** to make it numb. A plastic mouth guard will be placed between your teeth to protect the scope and your teeth. You will be able to breathe normally throughout the test.

You will be asked to turn onto your left side and the lights will be dimmed so that the images can be seen more clearly. A sedation may be given if required. If you need oxygen they will give it to you via a small mask or tube in your nostrils.

Your doctor will perform the procedure. A nurse and physiologist may be present in order to assist. The doctor will place the ultrasound scope into the back of your throat and may ask you to swallow to help the scope pass down to behind your heart and images of structures of your heart will be taken while moving the probe around. This may be uncomfortable but not painful

## **How long will the test take?**

The test will usually take 30-40 minutes but can sometimes take up to an hour to record all the images of the chambers and valves within your heart.

## **What happens after the test?**

At the end of the procedure, the tube will be removed, your blood pressure, heart rate and oxygen saturation will be re-checked, and you will be monitored for a short period to fully wake up from the sedation after the procedure. The sedation has an amnesic effect so you will not remember the majority of the procedure.