



Gloucestershire Hospitals
NHS Foundation Trust

Transoesophageal Echocardiography (TOE)

Information for patients

Introduction

This leaflet is for patients who have been referred for a Transoesophageal Echocardiogram (TOE). It explains:

- What the procedure involves
- Why it has been recommended for you
- The benefits and possible risks
- Alternatives to the procedure
- What to expect before, during and after the procedure
- Who to contact if you have concerns

If you have any questions after reading this leaflet, please speak to your doctor or nurse before your appointment.

What is a Transoesophageal Echocardiography (TOE)?

A TOE is a heart scan that uses ultrasound (sound waves) to produce detailed moving images of your heart.

A small flexible ultrasound probe is passed into your food pipe (oesophagus). The oesophagus lies directly behind the heart. This position allows very clear and detailed images of the heart muscle, heart chambers and heart valves.

You may already have had a standard heart scan called a Transthoracic Echocardiogram (echo / TTE), where a probe is placed on your chest. A TOE provides clearer images because the probe sits closer to the heart. The procedure usually takes between 20 and 40 minutes.

Why do I need this procedure?

Your doctor has recommended a TOE because it provides more detailed information than a standard heart scan (echo / TTE). The results can help:

- Confirm or rule out certain heart conditions
- Assess heart valve problems
- Detect blood clots or heart infections
- Plan treatment or surgery
- Guide certain heart procedures

What are the benefits?

The benefits of having a TOE include:

- Clearer and more detailed images than a standard heart scan which allow for more accurate diagnosis
- Helping your doctor decide on the best treatment for you
- Planning for procedures or surgery

Are there any alternatives?

In some cases, a standard echo (TTE) may provide enough information. Other scans such as CT or MRI may sometimes be used.

Your doctor has recommended a TOE because it is the most suitable test for your situation. You have the right to decline this test. However, not having the test may make it harder to diagnose or treat your heart condition. If you are unsure, please discuss this with your doctor before your appointment.

Risks

TOE is a safe procedure and serious complications are rare. The risks will be explained to you in detail before asking you to sign the consent form.

Possible risks include:

- Sore throat (common and usually mild)
- Damage to crowned teeth or dental bridgework (uncommon)
- Bleeding (uncommon and usually minor due to minor injury to mouth or throat from the probe)
- Tear (perforation) of the oesophagus (very rare but serious)
- Reaction to any of the medications used, such as breathing slowing down or low blood pressure

You will be closely monitored throughout the procedure and if there are any concerns, the procedure will be stopped immediately.

Throat spray and sedation

To make the procedure more comfortable, we use local anaesthetic spray to numb the back of your throat.

You may also be offered sedation for the TOE examination; this will be given intravenously (into a vein in your arm).

Sedation will make you lightly drowsy and relaxed, but not unconscious (asleep). You will be in a state called conscious sedation and although drowsy you will still hear what is said to you and therefore will be able to

follow simple instructions during the procedure.

If you are considering sedation, you must arrange for a responsible adult to collect you from hospital and someone must stay with you for 24 hours after the procedure. You must not drive, operate machinery, sign legal documents or drink alcohol for 24 hours.

Where will the procedure take place?

Your TOE will be performed as a day case at Gloucestershire Royal Hospital. Your appointment letter will tell you where to go and what time to arrive.

Preparing for the TOE

Food and drink

Do not eat or drink anything (including chewing gum) from midnight of the night before your appointment. If you normally take tablets in the morning, you may take them with a small sip of water. If you normally take tablets for diabetes, see below.

Anticoagulation (blood thinners)

If you are currently taking warfarin, you **must** have an INR blood test within the week before your TOE appointment. If you cannot book an INR appointment, please telephone Cardiac Investigations, the number is at the end of this leaflet.

Please tell the nurse when you arrive at hospital if you are taking an anticoagulant (blood thinner) medication such as warfarin, apixaban, rivaroxaban, edoxaban or

dabigatran. We do not routinely ask for anticoagulation to be stopped before having a TOE.

Diabetes

If you have diabetes, we advise that you **do not** take any of your diabetic medication (insulin or tablets) on the morning of your procedure. Bring your diabetes medication with you and inform the nurse on admission that you are diabetic. After the procedure, you can restart your diabetes medications.

What to bring into hospital?

Please bring the following:

- A list of any medication you are currently taking
- Your reading glasses
- A book or magazine

Please do not wear any jewellery, make-up or nail varnish when you come for this appointment. Do not bring any valuables with you, as we cannot take responsibility for any losses.

On the day of the TOE

When you come into hospital for the TOE, a nurse or doctor will discuss the procedure with you and ask questions about your health. You will have a cannula (thin plastic tube/drip) inserted into one of the veins in your arm.

We will then ask you to sign a consent form. By signing this form, you will have agreed to have the test

performed and that you understand why it is needed. This does not take away your right to have the test stopped at any time.

If you have any allergies or have had bad reactions to any medication or other tests, please tell the nurse and/or doctor.

You must also tell the staff if you have:

- Had surgery or any other procedure to the throat, neck or oesophagus
- Indigestion type symptoms
- Difficulty in swallowing food
- Ever coughed or vomited blood
- Any false teeth, loose teeth, crowns or caps

This is because it may be necessary (at another time) to examine your throat, oesophagus and stomach more closely to check that there are no problems.

What will happen during the test?

- You will be taken to the procedure room and will be asked to lie on a trolley
- A probe will be placed on your finger to measure your pulse and oxygen levels
- A cuff will be placed on your arm to measure your blood pressure
- 3 ECG pads, attached by wires to the echo machine, will be put onto your chest or back. This allows your heart rhythm to be monitored during the procedure
- You will be given a small amount of oxygen to breathe via prongs placed up your nose

- Before we start the TOE, you will be asked to confirm your identity, and we will make some safety checks
- You will be asked to open your mouth wide, then the doctor will spray local anaesthetic to the back of your throat to numb the area
- To protect your teeth and the probe, a small plastic mouth guard will be put into your mouth and gently secured around your head with a strap. This will not interfere with your breathing
- You will be asked to lie on your left side on the trolley and you will be made as comfortable as possible
- Once you are comfortable, we will turn the lights down
- Sedation may be given at this point through the cannula (drip)
- The probe will be passed into your mouth, over your tongue and the doctor will ask you to swallow. This helps the probe pass smoothly into your oesophagus
- A nurse will monitor your blood pressure, pulse and oxygen levels throughout the TOE
- When the examination is finished, the probe is removed quickly and easily

What should I expect after the procedure?

After the TOE, you will be taken to a recovery area. A nurse will check on you regularly.

Because the anaesthetic throat spray can affect your swallowing reflex, you will not be given anything to eat or

drink for an **hour** after the procedure. After an hour, you will be given some cold water to drink. The nurse will decide when you are ready to go home.

Going home

If you have not received sedation, you will be able to go home after around one to one and half hours after your procedure.

If you have been given sedation, you will be able to go home after around two and half hours, once fully recovered.

For the rest of the day:

- Eat light meals
- Avoid very hot food and drink
- Rest and relax, avoiding strenuous activities

If you have been given sedation, it is essential that someone comes to collect you from the hospital and that you have a responsible person to stay with you overnight.

You must not drive, sign legal documents, operate machinery or drink alcohol for 24 hours following sedation.

You should also not to return to work for 24 hours after being given sedation.

When should I seek medical advice after TOE?

Seek urgent medical attention or contact your GP if you have any of the following:

- Severe chest or neck pain
- Difficulty swallowing that worsens
- Vomiting blood
- Black stools (poo)
- High temperature
- Severe shortness of breath

These symptoms are uncommon but require medical assessment.

Results

The results of your TOE examination will usually be sent to the doctor who referred you for TOE within a few days. You may also be told the results after the procedure but if you have had sedation, you may not remember the information clearly.

If you have not heard about your results within the expected time, please contact the referring doctor's secretary or your GP.

Contact information

If you have any questions or concerns about this procedure, please contact Cardiac Investigations Booking Office. Please be aware that they are not medically trained and will not be able to answer medical questions.

Cardiac Investigations Booking Office

Tel: 0300 422 6551

Monday to Friday, 9:00 am to 4:00 pm

Content reviewed: April 2026

Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.

Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?



These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation.

*Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial.

Patient Education and Counselling, 2011;84: 379-85



<https://aqua.nhs.uk/resources/shared-decision-making-case-studies/>



Registered Charity 1051606

Every donation you choose to give helps your local hospitals do more to care for you, everyone you love and our passionate NHS staff.
If you would like to find out more, please contact:
Charity Office **0300 422 3231** or visit gloshospitals.nhs.uk/charity

GHPI0758_04_26
Department: Cardiology
Review due: April 2029
www.gloshospitals.nhs.uk