Transoesophageal echocardiogram (TOE)

Consent information for patients
Your doctor has recommended that you have a transoesophageal echocardiogram (TOE). A TOE is an ultrasound scan that allows the doctor to look closely at your heart without other organs blocking the view. In order to carry out the procedure, a special scope (a long flexible tube) that is attached to the ultrasound machine is passed through your mouth and down your throat. The scan produces pictures of your heart which can be seen on a monitor by the doctor.
What happens before the procedure

• You may have a drink and light snack (e.g. toast, biscuit) before going to bed on the night before your procedure.

Please do not eat any food or drink milk after 2am. You may drink water until 6am.

It is recommended that you have at least 1-2 glasses of water at 6am before you come in to hospital for your procedure. Do not drink or eat anything after drinking this water, unless your nurse or doctor advises you to. Please check the details on your admission letter or, if you are already in hospital, ask your nurse.

• At 6am take any medication you would normally take, unless advised otherwise. If you take any blood thinning medication, such as warfarin, please check with your consultant whether you should continue to take this before the procedure. If you take ‘water tablets’ (diuretic medication), such as furosemide, you can normally stop taking this in the morning before you come in, but please bring your tablets with you. This will help to make things more comfortable for you during the procedure.

Please bring all your medications with you to hospital. The nurses will look at your tablets when you are admitted and will explain when you can start taking them again after the procedure.

• The doctor will explain the investigation to you, including the risks and benefits, and then you will be asked to sign a consent form to confirm you are happy to go ahead.

• Before the investigation, a small tube (cannula) will be inserted into your arm so that we can give you sedation during the procedure. You will feel relaxed and sleepy.

• If you have any concerns, please do not hesitate to ask, as we would like you to be as relaxed as possible about the procedure. We will be happy to answer any queries you might have.
What happens during the procedure?

- The investigation is carried out in a treatment room.
- You will wear a hospital gown for the procedure.
- A blood pressure cuff will be attached to your arm and a small monitor placed on your finger to monitor oxygen levels in your blood.
- The doctor will briefly explain the investigation again. They will then spray 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 scope (tube) 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. When you are sleepy the investigation will start.
- The investigation is carried out by the doctor. Other staff members, including another doctor and a nurse, are present to help with the procedure and make sure you are comfortable.
- When the tube is put in to your mouth you may be aware of it, depending on how drowsy you are. Try to breathe gently through your nose, don’t try to talk and try not to swallow as this increases the risk of choking. You may find that your mouth waters; this is normal and nothing to be embarrassed about.
- The investigation normally takes 20-25 minutes.
- When the investigation is finished the tube will be removed quickly and easily.
What are the benefits?
The information we can see from the transoesophageal echocardiogram images can:

• help the doctor to find out the reasons for your symptoms
• help the doctor to decide if you need any further procedures or treatments.

What are the risks?
• Risks from transoesophageal echocardiography are very low. Most people tolerate the investigation well although you may have some mild symptoms during the investigation (mostly coughing).

• Serious risks are very rare and include:
  – arrhythmia – palpitations (irregular heart beat) – 0.7% (7 patients in 1000)
  – angina (chest pain) – 0.1% (1 patient in 1000)
  – bronchospasm/hypoxia (difficulty breathing) – 0.8% (8 patients in 1000)
  – bleeding – 0.2% (2 patients in 1000)
  – oesophageal perforation – split or damage to the pipe that carries food from the mouth to the stomach – extremely rare, less than 0.01% (1 in 10,000 patients).

Your doctor will only recommend that you have a transoesophageal echocardiogram if they feel that the benefits of the procedure outweigh the risks. The figures quoted in this document are average figures for all cases. Your doctor will discuss with you any specific risks that relate to you.
What are the alternatives?
Your doctors 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 the consent form.

What happens after the procedure?

- The sedation has an amnesic effect so you should remember little of the investigation after the sedation wears off. The effects of the sedation can last for a few hours. Although you will usually be awake and talking within an hour or so, you may not remember what you were talking about. This is only temporary.

- Your blood pressure and breathing will be checked and you may need to wear an oxygen mask while the sedation wears off.

- After 30-45 minutes, when the anaesthetic to your throat will have worn off, you will be offered refreshments. When you are able, you may get dressed.

- After a couple of hours the doctor will return to discuss the results of your investigation with you.

- As you have had sedation, you cannot drive yourself home after the procedure. You will need to arrange for someone to accompany you home by car or taxi. You will also need to have someone responsible to stay with you for the next 24 hours, as you recover from the sedation.
How to contact us

**Cardiac Angiography Suite**
Tel: 01865 572 616 (Monday to Friday, 7.30am-9.00pm)

Further information

For further information the following web sites are recommended:

**British Heart Foundation:**
www.bhf.org.uk

**British Cardiovascular Society:**
www.bcs.com

**Please note:**
The department where your procedure will take place regularly has professional observers. The majority of these observers are health care professionals, qualified or in training, and on occasions, specialist company representatives. If you do not wish observers to be present during your procedure please inform a doctor or nurse.
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

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