

your finger and your heart rate will be monitored using sticky pads on the chest. The lights in the room will be dimmed. You will be asked to lie on your left hand side and a plastic mouthguard will be put in your mouth. If you have asked for sedation during the procedure you will be given this now via the needle (cannula) in your arm. You will be sleepy after the sedative but will not be totally asleep usually. The doctor will place the ultrasound probe (which is a long thin tube about the size of your little finger) into your mouth and will ask you to swallow the probe. This is usually the most difficult part of the procedure for patients, and it helps if you can stay as relaxed as possible during this part of the test. Often it can help to perform deep breathing exercises at this stage and keep your eyes closed to help you relax. Once you have swallowed the probe it is common for you to drift off to sleep whilst the pictures of your heart are taken. The procedure usually lasts around 20 minutes. After the procedure you will be given some time for the effects of the sedative and throat spray to wear off. You will often be allowed home 1-2 hours after the procedure. You will need to arrange someone to accompany you home after the procedure if sedation is given.

### What happens after the TOE?

If you have had sedation for the procedure you should make arrangements for someone to be at home with you for 24 hours after the test and ensure that you do not drive or operate heavy machinery during this time. You may have a sore throat or mild discomfort on swallowing for several days following the procedure.

### Any questions or comments?

If you have any comments about this leaflet (good or bad), then please contact [office@nwhearts.org](mailto:office@nwhearts.org).

NW Hearts Charity always welcomes feedback about how we are doing and how we might improve. Unfortunately, NW Hearts Charity can't answer questions about your own health situation. 2024/V1

### What we do:

- We improve heart health outcomes in and around Greater Manchester.
- We promote prevention, education, equity and excellence in heart care.
- We raise money so we can support more people and projects to reduce the impact of heart disease.

**Disclaimer:** NW Hearts Charity hopes that anyone reading this information finds it helpful. However, this is general information and does not replace medical advice, diagnosis or treatment. Please speak to your healthcare professional if you have any questions about your health. So far as is permitted by law, NW Hearts Charity does not accept liability in relation to the use of any information published by us.



Patient information  
leaflet developed by  
**NW Hearts Charity**

You can support us with a donation  
by using this QR code:



Find out More about Us at:  
<https://www.nwhearts.org>

Reg. Charity no. 1194189



# Transoesophageal echocardiogram (TOE)

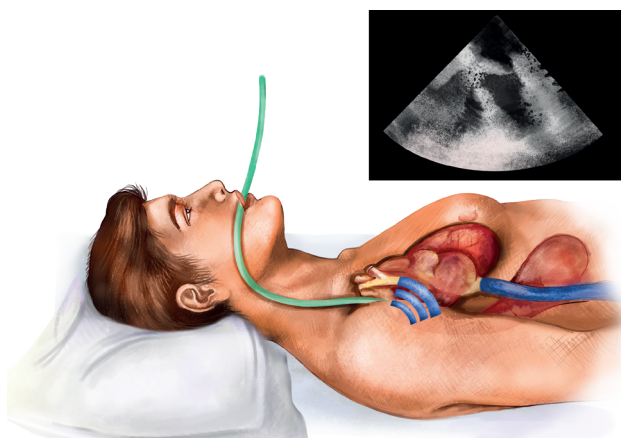
Patient information leaflet



**NW Hearts Charity**  
Your heart • Your charity

## What is a transoesophageal echocardiogram (TOE)?

A transoesophageal echocardiogram (also known as TOE) is a test that is performed to take detailed ultrasound pictures of your heart. Ultrasound is an imaging technique that uses sound waves rather than radiation to generate moving pictures. It is usually a day case procedure performed under sedation and local anaesthetic throat spray. A thin ultrasound probe is passed down the oesophagus (food pipe or gullet) in order to obtain detailed pictures of the heart chambers and heart valves.



## Why is a transoesophageal echocardiogram performed?

There are many reasons that you may need a transoesophageal echocardiogram. Often the procedure is performed to take detailed pictures of the heart valves or to look for blood clots in the top chamber of the heart (left atrium). Other reasons include to look for holes in the heart or at masses within the heart.

## What are the benefits of the procedure?

The procedure is performed to allow decisions to be made about your cardiology care, where it has been decided that more information needs to be provided about your heart that cannot be provided by a transthoracic echocardiogram (echo or cardiac ultrasound performed through the front of your chest). It is a diagnostic procedure, this means that it

is performed simply to gather information, rather than to treat any underlying cardiac condition.

## What are the risks of the procedure?

A transoesophageal echocardiogram is a safe and straightforward procedure, however, as it is an invasive procedure there are some risks that you need to be aware of before signing the consent form for the procedure. It is common to have a sore throat after the procedure which may persist for a few days afterwards. We use a mouthguard to protect your teeth and mouth during the procedure but there is still a small risk of damage to your mouth or teeth. Most people are given an injection of sedation for the procedure and this carries a small risk, however, your heart rate and oxygen levels will be monitored throughout the procedure. The most important complication associated with the procedure is damage to the oesophagus (food pipe or gullet) when the probe is passed. If this occurs it is a serious complication. The risk of this complication is rare, between 1 in 1000 and 1 in 10,000. In a small proportion of patients it is not possible to pass the probe and the procedure needs to be abandoned (if this is the case the Doctor will explain the next steps such as undergoing the procedure under general anaesthetic or performing a different procedure instead).

## Are there any people that cannot have the procedure?

Transoesophageal echocardiography (TOE) cannot usually be performed in patients who have had surgery on the oesophagus (foodpipe or gullet), a tumour or narrowing (stricture) in the oesophagus, those with a pouch in the gullet or throat (pharyngeal pouch) or those with abnormal veins in the gullet related to liver disease (oesophageal varices). Also, the procedure cannot usually be performed if you have difficulty swallowing (food gets stuck in the foodpipe when you swallow) – often this will need investigation prior to the transoesophageal echocardiogram (TOE). You should let the doctor know if you have had any of these problems before your procedure. You should also inform the doctor performing the procedure if you have any loose teeth or

difficulty moving your neck. Sometimes the doctor may still decide to go ahead with the procedure after you have informed them about these problems after a careful risk assessment, and you can discuss any concerns with them on the day of your procedure.

## What should I bring with me to hospital?

It is helpful to bring a list of your usual medications with you. Wear comfortable clothes that are easy to get changed out of and in to. You may wish to bring a dressing gown and something to read whilst you are waiting. If you use a walking aid then please bring this with you if you feel you will need it.



## What should I expect on the day of the procedure?

You will be asked to have nothing to eat or drink for at least 6 hours prior to the procedure (normal medications can be taken with a sip of water). When you arrive in Hospital you will be asked to change into a gown and a small needle (cannula) will be inserted into your arm. A nurse will ask you some general questions. A doctor will ask you to sign a consent form for the procedure. When you come into the room for the procedure, you will be given a throat spray to numb up the back of your throat and oxygen will be delivered via your nose. If you wear dentures or glasses you will be asked to remove them. Oxygen levels will be checked using a probe placed on