

# Transoesophageal Echocardiography

Cardiology

## Introduction

This booklet will give you more information about this procedure which the doctor has already explained to you. It is aiming to:

- Help you understand what will happen to you
- Explain the possible benefits and risks of this procedure
- Explain other alternatives if you do not wish to go ahead with the procedure
- Make sure you know as much as possible about the procedure before you agree to it and sign the consent form

## What is Transoesophageal Echocardiography (TOE)?

- A TOE is a procedure which involves taking detailed ultrasound images of your heart from the gullet (oesophagus) which lies directly behind your heart
- Note that this is a diagnostic test and not a treatment of your heart condition. It provides excellent views of your heart chambers and valves, and allows us to examine how efficiently they are working
- The test is performed as a day case procedure under local anaesthetic to the throat +/- sedation depending on both your preference and your medical conditions.

## Consent

We must seek your consent for any planned procedure, except in an emergency, or treatment beforehand. Your doctor will explain the risks, benefits and alternatives where relevant before they ask for your consent. If you are unsure about any aspect of the procedure or treatment proposed please do not hesitate to ask for more information.

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

# What are the benefits and risks of having a TOE?

## Benefits:

This procedure provides the most accurate information in diagnosing disorders of the heart valves such as:

- Infection of the heart valves (endocarditis)
- Assessment of the heart valves to clarify whether they have normal structure and if they are working well, or if not working normally, how leaky or stiff a valve is. This can then guide your doctor in working out whether any procedure may be required in future
- Detecting the presence of a blood clot (thrombus) in the heart chambers

## Risks:

A TOE requires the introduction of a flexible ultrasound probe into and down the gullet; it is generally a very safe procedure and is usually tolerated well.

Significant risks are rare and can be reduced further if we are aware of any problems you have: for example, these include swallowing difficulties, any previous surgery, procedures or radiotherapy to you gullet, chest, neck or upper back:

- Incidence of major complications 0.5% (one in every 2000). Mortality rate of 0.01% (one in every 10,000)
- Abrasion to the throat or bleeding from the mouth may occur as well as a mild sore throat which should resolve in 24-48 hours
- Risk of injury to teeth or gums, caps or crowns
- A tear of your gullet
- Aspiration (risk of inhaling stomach contents), particularly if you have not fasted properly for six hours prior to the procedure
- Disturbance of your heart rhythm
- Adverse reaction to sedation, this may result in a reduced respiratory rate or an allergic reaction

# What are the alternatives if I decide not to have this procedure?

- Your doctor has recommended this investigation to obtain more detailed information about your condition, which cannot be gained from your investigations to date
- The information will provide insight into your condition that is likely to help the way your future treatment is planned and delivered
- If you are having planned valve surgery or valve intervention, the information can help your cardiologist or surgeon plan your operation in advance
- Without this information, it may not be possible to advise you fully on appropriate treatment

# How do you need to prepare for the procedure?

- It is essential that you do not eat anything for six hours before the procedure. You can drink up to 200 ml of plain water in the time from six hours before up until two hours before the procedure. From two hours before the procedure you must not drink anything. The procedure cannot be performed if you have not followed these instructions
- Continue to take all your medication (with only a small amount of water). If you are diabetic, follow the instructions in the medications section below

## Medications: What to do if you are diabetic?

If you are diabetic on insulin:-

- If your procedure is in the morning: do not have breakfast and do not take your insulin
- If your procedure is in the afternoon: have breakfast (before 8am) and half of your morning dose of your insulin (minimum of 10 units)
- If you are on insulin four times a day: take your usual morning dose with breakfast (before 8am) for an afternoon appointment
- If you take metformin take your usual morning dose
- If you are a diabetic not on insulin: you can have a light breakfast before 8am on the morning of the procedure for an afternoon appointment

## What if you are on a blood thinning medication?

You should continue to take your blood thinning medication unless specifically asked by your doctor to stop.

If you take warfarin, please bring your recent INR result and INR booklet with you. We may also recheck your INR on the day.

## What will happen at the hospital before your procedure?

- Bring your medication in the original containers
- We advise you not to bring large sums of money or valuables. If this is unavoidable they should be handed in for safekeeping
- Unless you need someone to stay to interpret or assist with special needs, we ask that relatives or friends who bring you come back when you are ready to go home
- You will be allocated a bed in the day ward
- You will be fitted with a wristband with accurate details about you on it. It ensures that staff can identify you correctly and give you the right care. It is important that you do not remove it until you go home
- We will check your blood pressure, pulse and oxygen levels
- A small plastic tube (cannula) will be inserted into a vein in your arm to allow sedation and other drugs to be given intravenously
- We ask you to remove dentures just prior to the procedure, and to tell us if you have any capped or loose teeth
- Please inform us of any allergic reactions you have had in the past
- Only clothing above the waist need be removed, we will provide you with a gown to wear
- Please do not wear jewellery, make-up or nail varnish; your wedding ring may be left on if you wish, we can cover it with tape
- You will need to inform us if you have ever been notified that you are at risk of CJD or VCJD for public health purposes CJD is an abbreviation for Creutzfeldt Jakob Disease. VCJD is an abbreviation for Variant Creutzfeldt Jakob Disease
- You will need to inform us if you are, or think you may be pregnant
- You will need to arrange transport home. You must not drive, operate machinery or make legal decisions for 24 hours from the time of your sedation, as your judgement will still be affected by the sedation
- If you wear contact lenses please wear glasses instead and bring your glasses case with you

## What happens during the procedure?

The TOE is performed in the Cardiac Catheter Suite. A nurse will remain with you throughout the procedure.

- The physiologist places sticky pads (electrodes) on your chest to monitor your heart rhythm and rate
- A small probe is clipped to your finger to monitor oxygen levels and pulse rate. Oxygen may be administered via a small tube in the nostrils if you are given sedation
- Anaesthetic spray is applied to the mouth and throat. You will then be asked to lie on your left side
- A small mouth guard is inserted into your mouth to bite on; this will protect your teeth and the probe from damage
- Your doctor may administer sedation to make you sleepy, if this is something you want, and if it is considered medically appropriate for you
- Although sedated you will still be able to hear the doctor or nurse talking to you. It is important that when you are asked to swallow you continue to do so to help the probe to pass easily into your gullet. The doctor or nurse will talk to you during the procedure helping you to relax with your breathing. Occasionally we may use suction to clear your mouth of saliva for your comfort
- The procedure usually takes between 20-30 minutes, after which the probe and mouth guard are removed
- You may not remember everything afterwards but the doctor or nurse will come and talk to you when you come round

## What happens after the procedure?

- You will be taken back to the recovery area
- You may still be wearing your oxygen mask when you wake up
- Your pulse rate and oxygen levels will be checked regularly while you sleep off your sedation
- Your throat may feel swollen similar to when having a dental local anaesthetic. It is for this reason we wait approximately one hour before giving you a drink and a little longer for food. This is to prevent the risk of choking
- The cannula will be removed from your arm and a small dressing applied
- You will need to arrange transport home; you must not drive for 24 hours because the sedation may affect your judgement, even though you may feel fine
- If you work, it is advisable to take 24-48 hours rest especially if you operate machinery, again due to the effects of sedation
- You may have a sore throat for a day or two. It will help if you drink plenty of fluids and take painkillers that you know suit you. Soluble ones may be more comfortable to take

## When can I go home?

You will usually be fit enough to get home within two to three hours.

## When to seek medical advice after a TOE:

1. Blood in your saliva or on coughing more than 24 hours after the procedure, or earlier than this if large amounts of blood
2. Fever with or without neck or chest discomfort
3. Vomiting blood
4. Difficult breathing

Contact Cath Suite during 8:00am to 6:00pm.

Out of hours, contact 111 / Emergency Department.

## How to contact us

### **Cardiac Catheter Suite Reception**

Third Floor, Wolverhampton Heart and Lung Centre

New Cross Hospital, Wolverhampton

WV10 0QP

Tel: 01902 694273

## Additional information is available from:

### **Wolverhampton Coronary Aftercare Support Group (WCASG)**

Heart and Lung Centre, New Cross Hospital, Wolverhampton.

Email: [wcasg@gmail.com](mailto:wcasg@gmail.com)

Tel: 01902 755695 Mobile: 07889 063647

Website: [www.have-a-heart.net](http://www.have-a-heart.net)

### **Patient Advice & Liaison Service (PALS)**

New Cross Hospital

Tel: 01902 695362 Mobile: 07880 601085

Pager: 1463 (Dial 01902 307999 and ask the switchboard operator to connect you to the pager).

Email: [rwh-tr.PALS@nhs.net](mailto:rwh-tr.PALS@nhs.net)

### **Age Concern Wolverhampton**

Supportive discharge service for anyone aged 50 or over, based in New Cross Hospital

Tel: 01902 695517 or 07753 718929

### **British Cardiac Patient Association**

15 Abbey Road, Bingham, Nottingham, NG13 8EE

Website: [www.bcpa.co.uk](http://www.bcpa.co.uk)

Telephone: 01954 202022 Fax: 01223 846845

### **British Heart Foundation**

Greater London House

180 Hampstead Road

London, NW1 7AW

Website: [www.bhf.org.uk](http://www.bhf.org.uk) Telephone: 020 7554 0000

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。