

# Cardiac Diagnostic Services

## Transoesophageal echocardiogram (TOE)



### What is it?

It is a complimentary way to perform an echocardiogram. A specialised probe containing an ultrasound transducer at its tip is passed into the patient's oesophagus. This allows for more detailed/ close up information for your doctor that cannot be obtained from a standard echocardiogram.

### Why do I need it?

Your doctor may request a TOE if highly detailed information is required, if a transthoracic echocardiogram is not possible or the images are poor quality. A TOE is often used during cardiac surgery and during cardiac intervention procedures.

A TOE shows detailed information about the heart including:

- > Any problems with the size and structure of the heart
- > The amount of blood the heart can pump
- > Structure and motion of your own heart valves, or heart valve replacements
- > Presence of clots or tumours
- > Presence of holes or shunts within the heart
- > Condition of the aorta and other major blood vessels

### How do I prepare?

To prepare for the TOE you should:

- > Fast for a minimum of six hours prior to the procedure, or as directed by your doctor
- > Take all medications in the morning with only a sip of water
- > Arrange for someone to drive you home afterwards
- > Tell the doctor about all your medications and bring a list of these to the hospital
- > Tell the doctor if you are allergic to local anaesthetics, latex (rubber) or medications

### What should I expect?

A TOE procedure requires a day admission to Epworth. Please bring your doctor's referral. On arrival you will be admitted to the Day of Surgical Admission (DOSA) unit where paperwork is completed.

In DOSA you will change into a hospital gown. You are then taken to the Cardiac Diagnostic Services (CDS) unit on a hospital trolley. A CDS nurse will confirm your consent has been given and connect you to monitoring equipment (a blood pressure and heart rate monitor). The nurse will insert an intravenous (IV) cannula into a vein, in order to give medication.

A transthoracic echocardiogram is usually performed by a cardiac sonographer prior to the TOE. Then the cardiologist will numb your throat, using a spray. You will receive mild intravenous sedation to help you relax. This is not a general anaesthetic, however the effects are similar and you may become drowsy. The cardiologist will then guide the small

flexible endoscope or TOE transducer, down the throat and into the oesophagus. To help it go down, you will be asked to swallow. You may gag a little, but this is normal. It may help to remember the endoscope is no larger than most food you swallow. The ultrasound transducer at the tip of the endoscope enables the cardiologist to get detailed images of your heart. This usually takes about 30 minutes. The endoscope is then removed, the IV cannula taken out and a nurse will continue to monitor you until the sedation wears off. You will then be returned to DOSA and discharged from hospital.

- > Most TOE's take up to 2 hours to complete.
- > If any symptoms persist after the test please seek advice from the cardiologist.

### After the test

Because your throat has been numbed, you will need to wait until feeling returns before eating or drinking. This may take one to two hours. Start with liquids and soft foods only. You may feel tired or weak for the rest of the day – be careful as you walk or climb stairs. You will be told not to drive, operate hazardous machinery, return to work or make any important decisions until the day after the procedure. You may experience some throat soreness for one or two days after the test.

The results will be sent to your referring doctor. It is recommended that the results and what they mean be discussed with your doctor.

### Are there any risks?

The images obtained with a TOE offer a more detailed view of structural heart problems than other tests. The majority of patients find the TOE a comfortable procedure. Talking to your cardiologist is an important part of learning about any risks and benefits. Be sure to ask any questions you may have.

### Risks can include:

- > Potential for slight reaction to the sedative
- > Mouth/throat discomfort and nausea
- > Temporary rapid breathing
- > Though very rare, injury to the oesophagus, which may cause bleeding or infection

### When should I contact my doctor?

Contact your doctor if you experience any of the following:

- > Pain or bleeding
- > Difficulty swallowing more than one or two hours after the test
- > Any other symptom that is not normal for you.