

Transesophageal Echocardiography (TEE)

Introduction

Transesophageal echocardiography (TEE) aims at studying the structure and function of the heart. It is performed through introducing a probe of 1cm in diameter through the mouth into the oesophagus.

Importance of Procedure

Sometimes, image obtained by transthoracic echocardiography is not adequate to give satisfactory study of cardiac structure and function. The close position of the esophagus to the heart allows improved visualization of many cardiac structures. TEE is usually used to study congenital heart disease, cardiac masses or thrombus, infection of heart valves and aortic dissection. TEE is also used during some kinds of cardiac surgery. If you refuse the test, we may not be able to accurately study your heart structure and function. Other alternatives are magnetic resonance imaging and cardiac catheterization. However, patients with swallowing difficulty or previous pharyngeal or esophageal surgery are not usually considered for this test.

Pre-Procedure Preparation

- It is usually an out-patient procedure.
- Fasting for 4-6 hours is required prior to the procedure, intravenous fluid may be given
- Our staff will explain to you and/or your relatives the procedure with the possible risk and complications, you have to sign an informed consent.
- You will be asked if you have allergic history and prior intolerance of sedative medications.
- You are advised to accompany by relatives.

The Procedure

- Blood pressure cuff, pulse oximeter and ECG leads will be connected. Your vital signs will be continuously monitored during the test.
- Any dentures will be removed.
- You will be asked to lie in left lateral position.
- Just before the procedure, Xylocaine spray will be applied to the pharynx for local anesthesia.
- Low dose intravenous sedation may be given.
- The probe, which is at the tip of the endoscope, will be lubricated & slowly introduced into your esophagus with the assistance of physician and your swallowing motion.

- The study takes around 10-15 minutes, please relax during the examination. Dribbling out of saliva is expected and will be taken care of.
- After the examination, the probe will slowly be retracted.

Post-Procedure Care

- No oral intake for 1 hour after the examination to avoid risk of aspiration.
- If sedative has been given, it may last for 1-2 hours, you will only be allowed to leave after fully recovered from the drug effect.
- Do not take sedative drug, drink any alcoholic beverage, drive a car or control any machine within 24 hours of examination.
- If there is any discomfort after the examination, please contact us or attend the near-by Accident & Emergency Department.

Risks and Complications

- The examination carries certain risks.
- Major complications: major bleeding, esophageal perforation, significant arrhythmias, congestive heart failure and aspiration, occurs with a frequency of 0.3% with reported mortality of less than 0.01%
- Sore throat and blood-stained saliva are common and will recover in 1-2 days.
- Device deployment complications include device dislodgement, device entrapment and wire fracture.

Remarks

- It is hard to mention all the possible consequences if this procedure is refused.
- The list of complications is not exhaustive and other unforeseen complications may occasionally occur. The risk quoted is for general reference only.
- If a complication developed, another life-saving procedure or treatment may be required immediately.
- If there are further concerns about this procedure, please feel free to contact our medical staff.