



Procedure Information Sheet

Introduction

Transesophageal echocardiography (TEE) is an imaging examination of heart structure and function through the use of ultrasound wave. It is performed by putting an endoscopy-like instrument through patient's mouth into esophagus. At the tip of the instrument is an imaging probe. It can produce ultrasound wave that can penetrate esophagus and assess heart structure and function.

Routine echocardiogram (ultrasound probe placed over chest wall) sometimes cannot provide satisfactory result because of poor imaging quality. The close position of the esophagus to the heart (right behind it) provides a good opportunity for imaging of the heart.

Indication

Major indications of TEE include congenital heart disease, cardiac tumour or emboli, infective endocarditis and aortic dissection.

The Operation / Procedure

1. Blood pressure cuff, pulse oximeter and electrocardiogram leads will be applied.
2. If present of dentures, should be removed.
3. Patient will be instructed to lie in the left lateral position.
4. Xylocaine spray will be given to the pharynx as local anesthesia, low dose intravenous sedation will be given if necessary.
5. Doctor will slowly introduce the ultrasound probe into the mouth and esophagus. Patient has to cooperate by doing a swallowing action when instructed.
6. The examination takes about 10-15 minutes. Please relax during the procedure. To avoid aspiration, do not try to swallow saliva.
7. After the examination, the probe will be slowly taken out.

Before the Operation / Procedure

1. Doctor will explain the indication, risk and benefit of the procedure. Patient has to sign an informed consent.
2. Patient will be checked for any history of swallowing difficulty, radiation therapy or surgery to chest or neck region. Inquiry on allergy history will be asked.
3. Fasting of 4-6 hours is required prior to the procedure. An intravenous line will be set up.
4. Patient will preferably be accompanied by relatives or friends on procedure day.

After the Operation / Procedure

1. The effect of local anesthesia will last about 1 hour. Patient should not wash mouth or take food or drink within 1 hour after the examination in order to avoid aspiration into lung.
2. The effect of sedation will last for about 1-2 hours. Normally, can be discharged after the effect has gone.
3. If sedation has been given, please do not take sedative drug, drink any alcoholic beverage, drive a car or control any machine on the same day.

Risk and Complications

1. The procedure carries certain risks.
2. Major complications include death, esophageal perforation, significant arrhythmias, congestive heart failure and aspiration pneumonia. The frequency of major complications reported is 0.3%, and mortality is less than 0.01%.
3. Sore throat and slightly blood stained saliva are common after the procedure and may persist for 1-2 days.

Alternative Treatment / Investigation

Patients with swallowing difficulty or neck surgery are not usually considered for this test. Alternative imaging modalities may include cardiac magnetic resonance imaging or cardiac catheterization.

Disclaimer

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

Reference

Smart Patient Website by Hospital Authority:
Transesophageal Echocardiography (4/2019)

Patient's Label

Patient Name: _____
Hospital No: _____
Episode No: _____

Patient's Signature: _____ Date: _____