TEE (Transesophageal Echocardiography)

Patient Education & Preparation Instructions

What is TEE?

Transesophageal Echocardiography (TEE) obtains high resolution ultrasound images of the heart as it pumps.

The Purpose of TEE

TEE can be used to:

- Evaluate heart function
- Diagnose heart valve disease
- Evaluate the functioning of repaired or replaced heart valves
- Locate blood clots, aneurysms, masses, lesions, and areas of infarction in various parts of the heart

General Information

TEE can be done on an outpatient basis in the Surgical & Outpatient Procedures Department.

While the physician and an ultrasound technician obtain TEE pictures, a nurse monitors your condition – frequent blood pressure, pulse and oxygen saturation will be recorded, along with close observation of how you are tolerating the TEE.

The entire procedure takes about two hours, including monitoring and observation. The visualization itself takes about a half hour.

You will need someone to drive you to and from the appointment, if you are an outpatient.

Preparation Prior to Testing

- Please inform your doctor or nurse of any allergies or difficulty swallowing.
- You will not be allowed to eat or drink anything for six hours prior to the procedure.
- Your signature will be required on a consent form.
- An IV is started to administer drugs for sedation or discomfort.
- A cardiac monitor is used to observe your heart rate and rhythm.
- Any dentures are removed.
- Oxygen is usually given via nasal prongs.
- A local anesthetic is sprayed into the throat to numb the esophagus (the section of the digestive tract just about the stomach in the back of your throat).
- The head of your bed will be elevated slightly.
- You will be asked to lie on your left side.
- The room will be darkened for better visualization.

The Procedure Itself

During the TEE, the physician passes into the esophagus the flexible ultrasonic probe, which resembles a rubber tube with a scope on the end. The probe is advanced to various lengths to obtain different images of the specific areas of the heart.

How TEE Works

The probe is an ultrasonic transducer that both sends and receives sound waves. These sound waves reflect off tissue and blood cells in the heart. It is similar to the sonar used by whales to locate objects under water. A computer translates the incoming sound waves into pictures on a screen. Using the Doppler principle – sound waves reflect off moving objects at different frequencies – the computer can assign different colors to different types of blood flow. The physician can identify abnormalities by looking at heart wall motion, valve function, blood movement, and color changes.

Aftercare

- After about an hour of observation, you can return either to home (if an outpatient) or to your hospital room (if a hospitalized patient).
- You will be asked to not eat or drink anything for 1 hour following the procedure. You should be able to swallow without difficulty by this time.
- You should relax or rest for four hours, or for as long as your physician recommends.

Complications

Problems are rare, but as with any procedure, there are risks. Some include:

- Ruptured esophagus
- Fainting or unconsciousness
- Irregular heart rate/rhythm
- Ingestion of fluid into the lungs
- Trauma to the mouth, vocal cords, or esophagus

It is important to keep in mind that the risks involved in TEE are far outweighed by the benefit of knowing the exact state of your heart. The more your physician knows about the condition of your heart, the greater the chance for successful treatment.

Finding Out the Results

Your physician will discuss the results of the TEE with you. Your physician may recommend additional tests or treatments, depending on your diagnosis.

Aspirus Cardiology Clinic 715-421-7900

If you are unable to keep your appointment, please let Aspirus Cardiology Clinic know as soon as possible. Should you be admitted to the hospital, please inform your physician about your appointment.



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