

FREQUENTLY ASKED QUESTIONS ABOUT TRANSESOPHAGEAL ECHOCARDIOGRAPHY

Q: What is a Transesophageal Echocardiogram (TEE)?

A: A Transesophageal Echocardiogram is a useful tool used to evaluate the function and small detailed structures of the heart and associated vessels. The Transesophageal Echocardiogram is a variation of the Transthoracic Echo procedure. The TEE procedure uses ultrasound waves to produce images of the heart. Performing a TEE involves passing a tube into the esophagus, or swallowing tube. In North America the test is performed and interpreted by a physician, usually a cardiologist, specially trained in Transesophageal Echocardiography

Q: Why has my doctor requested that I have a Transesophageal Echocardiogram?

A: If you are going to have a TEE it is more than likely that it has been requested or ordered by your physician or a cardiologist. There are many reasons for requesting that you undergo this procedure. Physicians use this procedure to look for any abnormalities in the physical structures of the heart, including the heart chambers, valves, and associated blood vessels. This procedure is sometimes also used to look for abnormalities within the structures that a standard transthoracic echocardiogram is not able to highlight. This may include examining the detailed structures and functioning of the heart valves.

Q: How do I prepare for a transesophageal echocardiogram?

A: A transesophageal echocardiogram involves passing a narrow tube into the esophagus or swallowing tube. This requires a number of special preparations you may need to complete before the procedure. These preparations vary depending on the lab performing the procedure, so you should check with the lab performing your transesophageal echocardiogram. In general, you should not eat or drink fluids for several hours before the test, have someone drive you home, and be prepared to spend a few hours at the lab. If you currently take medications, you should check with your physician and/or the lab performing the test to let you know if you can continue to take them before the procedure.

Q: What should I expect?

A: Upon arrival at the lab, our staff will greet you. We may need to obtain additional insurance information and you will be asked to register, and may need to provide a prescription or order for your examination.

You will then be escorted into an ultrasound examination room. The room will be dimly lit and will contain a special examination table, an ultrasound machine, and other monitoring devices. You may be asked a few questions by the nurse or sonographer who will want to know why you are having the test, if you have had previous tests, if you have ever had open heart surgery and other questions about your medical history. You may be given a brief explanation of the procedure also. Sometimes, labs will call, or meet with you before the exam to ask these questions and explain the procedure.

You will then be asked to remove some of your clothing from the waist up. Women will be given a gown. If you need help, the sonographer or nurse will assist you in getting onto the stretcher. The staff will attach ECG lead wires to electrodes to your chest. These are attached using basic medical tape. A blood pressure cuff will be placed on your arm and a simple finger clip oxygen sensor will also be attached. You will be given oxygen through a tube which is worn on your nose. We will start an intravenous line (IV). If you wear dentures or partials, we will ask you to remove them.

The physician or nurse may give you IV medications to help you relax during the procedure. A topical medicine in the form of a gel or spray will be used to numb the back of your mouth.

The physician will place the flexible tube in your mouth. You will then be asked to swallow which will draw the tube into your esophagus. The tube is a modified endoscope scope which contains an ultrasound transducer that sends and receives the harmless ultrasound waves.

The physician will then begin to acquire ultrasound images and audio recordings by methodically and precisely moving the transducer in your esophagus and stomach. The movement of the tube should not be uncomfortable. The physician will be viewing the images on a monitor and will take various recordings at several different locations or “views”. You should try to remain still and quiet during the exam. The imaging will take 10 – 30 minutes.

The images and sounds of the exam will be recorded on a computer disk and/or videotape for later review.

Q. What will you see and hear on the echocardiography machine during your exam?

A. You may be able to see some of the images on the video monitor during the procedure.

Ultrasound waves used in performing the echocardiogram are not audible to the human ear, so you will not hear the sound waves. Structures will be displayed in “real-time” and appear as white moving objects on the screen. For example, the valves of the heart will look like white flap-like moving structures. Areas of the heart where there is fluid or blood will appear black on the screen.

During the exam, you will notice the physician placing marks on the screen with small computer calipers. The physician uses the calipers to perform various measurements of the size, function and blood flow of the heart.

An echocardiogram exam usually includes a Doppler recording of the blood movement or flow within the heart. When color flow Doppler is used in the exam, it will appear as different colors moving within the white and black images on the monitor. The different colors represent the different speeds and directions of blood flow in the heart.

Doppler examinations often include an audio signal of the blood flow. These audio signals can be heard and seen. During the audio Doppler recording, you will hear the sound of the blood moving through the heart and the sound of the heart valves opening and closing. (This is the typical blub blub sound you have probably heard when listening to another person’s heart or on TV). The audio signals are displayed as a graph on the monitor. These graphic recordings help the physician to determine valve function and heart pressures.