Transesophageal Echocardiogram

Welcome to the Echocardiography (Echo) Lab at University of Washington Medical Center (UWMC). We evaluate and diagnose heart disease by using ultrasound to show images of your heart.

The Echo Lab staff are experts in patient care and heart research. We will work with you and your health care provider to diagnose any heart problems you may have. This will help determine the best treatment for you.

A Transesophageal Echocardiogram

A transesophageal echocardiogram (TEE) is a special ultrasound exam of your heart. Ultrasound creates images of organs and other structures inside the body. It uses sound waves to produce these images.

In a regular echocardiogram, we take ultrasound images of your heart through your chest. In a TEE, we take these images through your esophagus, the tube that carries food from your throat to your stomach.

These images are taken with a sensor called a transducer. The transducer sends sound waves into your heart, and the sound waves bounce back from your heart to the transducer to make images on a monitor. The sound waves are safe and will not cause pain.

Before the TEE begins, a nurse will put a small intravenous (IV) catheter in a vein in your hand or arm. This IV will be used to give you any medicine you will need, such as a mild sedative that will make you sleepy. The IV will be removed after your exam.

You will need to swallow a small tube that holds the transducer. This is usually easier than it sounds, and you will have lots of help.

A cardiologist (a heart doctor) will help you swallow the small tube and then will do your TEE exam. A cardiac sonographer (an ultrasound technologist who specializes in images of the heart) and a cardiac nurse will help the cardiologist do your exam.

During the exam, we will monitor your blood pressure, heart rate, blood oxygen level, and heart rhythm. We will also help make you comfortable.
The images of your heart will be recorded on a digital computer system. The cardiologist will review the videotape and digital information after your exam. Your primary care provider will get detailed information about your heart's chambers, valves, and blood flow.

Why do I need this exam?

You are having a transesophageal echo because:

- We need to see the inside of your heart better than we can see it through your chest wall.

  Or

- More information about your heart is needed, and a TEE is the best way to evaluate your heart problems.

Scheduling a TEE

- Your health care provider has asked you to have a transesophageal echo. Allow at least 1½ hours for your exam.

- We will call you to remind you of your appointment 1 to 2 days before your exam.

On Exam Day

Important Instructions

- Do NOT eat or drink for 6 hours before your exam.

- If you need to take medicines in the 6 hours before your exam, take them with only small sips of water, not more.

- You must bring a responsible person to drive you home after your exam. The sedative you received will slow your reaction time and make it unsafe for you to drive or travel alone. It is against the law to drive if you are impaired in any way.

- We will try to start your exam at your scheduled time. Giving the best care and attention to each individual patient sometimes causes a delay.

- Once you are in the exam room, we will ask you to undress from the waist up and put on a hospital gown. You do not need to remove jewelry.

- Next, a nurse will put the IV catheter in a vein in your hand or arm.

- The cardiologist who does your exam will explain the procedure and will review important information and certain precautions. Be sure to ask any questions you have.
• We will ask you to read and sign a consent that indicates you understand and want us to do your transesophageal echo exam.

• After you sign the consent:
  - We will give you a mild sedative medicine through your IV. This medicine will make you sleepy.
  - The cardiologist will also give you medicine that will numb the back of your throat.
  - The cardiologist will help you swallow the small tube.

• Once the tube is in place, it will take about 10 to 20 minutes to take the needed images. The images will be recorded on a digital computer system. The tube will be removed when the exam is over.

• UWMC is a teaching hospital. The cardiologist, cardiac sonographer, and nurse doing your exam may be assisted by other medical staff who are being trained in echocardiography. Please do not be concerned by the discussion and teaching that may take place during your exam. We respect your privacy and your feelings, so please let us know if you feel uncomfortable.

• When the cardiologist has taken the TEE tube out, we will help you clean up and give you any follow-up instructions. You may dress and be on your way.

• You must have a responsible person drive you home after your exam. We cannot allow you to drive yourself or travel alone in a taxi cab or bus after receiving a sedative.

**Test Results**

After your transesophageal echo exam, the cardiologist will review the images and prepare a report. Your health care provider who referred you for this test will receive this report within 24 hours of your exam. Your provider will talk with you about the results of your exam at your follow-up appointment or over the phone.

**Important Questions**

Before your transesophageal echo, we will ask you these questions:

• Are you allergic to or have you had a bad reaction to any medicines, including numbing or sedative medicines?

• Do you have any swallowing problems?

• Do you have a history of bleeding or varices (enlarged veins) in your esophagus?
Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff are also available to help.

UWMC Echo Lab: 206-598-7000

- Do you have a family history of a bleeding disorder?
- Do you have trouble stopping bleeding once it starts?
- Do you wear dentures, bridges, or any removable teeth or dental prosthetics? If so, we will ask you to remove them at the time of your exam.
- Have you ever had hepatitis?
- Do you have diabetes? Do you take insulin or oral diabetes medicine? If so, your dose may need to be adjusted for this exam. Talk with your doctor who manages your diabetes for specific instructions.