

## Transesophageal Echocardiogram

An **echocardiogram** (often called an "echo") is a graphic outline of the heart's movement, valves and chambers. During the **transesophageal echocardiogram** (TEE) test, an ultrasound transducer (which produces high frequency sound waves) provides pictures of the heart's valves and chambers and helps the physician evaluate the pumping action of the heart.

TEE is often combined with Doppler ultrasound and color Doppler to evaluate blood flow across the heart's valves. TEE is often used when the results from standard echo studies were not sufficient or when your doctor wants a closer look at your heart. TEE is used to determine the presence of many types of heart disease, such as valvular heart disease, myocardial disease, pericardial disease, cardiac masses and congenital heart disease. It is also used to evaluate the effectiveness of medical or surgical treatment and abnormalities of the left atrium.

To prepare:

- You will change into a hospital gown to wear during the procedure. Do not bring valuables.
- DO NOT eat or drink anything, as directed by your physician.
- Take all of your medications at the usual times, as prescribed by your doctor with only a sip of water.
- If you have diabetes and take medications to manage your blood sugar, ask your physician how to adjust your medications the day of your test.
- Tell your doctor if you have any problems with your esophagus (tube connecting mouth to the stomach), such as a hiatal hernia or cancer.
- Bring someone with you to drive you home after the test. You should not drive until the day after the procedure. Sedation given during the procedure causes drowsiness, dizziness and impairs your judgment, making it unsafe for you to drive or operate machinery.

What to Expect:

- Before the test, the procedure will be explained in detail, including possible complications and side effects. Our team will be available to answer any questions you may have.
- You will be given a hospital gown to wear.
- An intravenous (IV) line will be inserted into a vein in your arm or hand so medications can be delivered when necessary.
- The nurse will connect you to several monitors:
  - **Electrocardiogram (ECG):** Three electrodes (small, flat, sticky patches) will be placed on your chest. The electrodes are attached to an electrocardiograph monitor (ECG) that charts your heart's electrical activity.
  - **Blood pressure monitor:** A blood pressure cuff will be placed on your arm to monitor your blood pressure intermittently throughout the test.

- **Oximeter:** A small clip is placed on your finger. The device monitors the oxygen level of your blood.
- You will be given a solution to gargle that will numb your throat. The sonographer will spray an anesthetic (pain-relieving medication) at the back of your throat.
- The doctor will put medication into your IV to help you relax and feel comfortable during the test. You may feel drowsy. If you feel discomfort at any time during the test, tell your doctor, nurse or sonographer.
- You will be asked to lie on your left side on an exam table.
- The doctor will insert a thin, lubricated endoscope into your mouth and down your throat, into your esophagus (this part lasts a few seconds and might be slightly uncomfortable). The tube does not interfere with your breathing. You may be asked to swallow at certain times to help pass the tube.
- Once the probe is in position, pictures of the heart are obtained at various angles (you will not feel this part of the test). Because of the sedative, you may not be entirely awake for the test.
- Your heart rate, blood pressure and oxygen level of your blood will be closely monitored during and immediately after the exam.
- The TEE will take about 90 minutes to complete.

After the Procedure:

- After you have recovered from the sedation, you may go home. You may NOT drive yourself home after the test.
- You may feel a temporary soreness or numbness in your throat after the test.
- Wait at least one hour after the test (or until the numbness in your throat is gone) before eating or drinking. Start by drinking a cool liquid. If you have no problems drinking cool liquids, eat and drink as you normally would.
- After the cardiologist reviews your test, the results will go into your electronic medical record. Your physician will have access to the results and will discuss them with you.

For questions or concerns, call the Cardiology Department at 561-263-4486.