

Transesophageal Echocardiography

Transesophageal echocardiography (TEE) is a test that looks closely at your heart. The doctor places a special tube, that has an ultrasound probe, into the esophagus which is located just behind the heart. This ultrasound probe sends and receives sound waves (echoes) from the heart. These echoes are transmitted to a TV screen where they form a picture of your heart. This is like the sonar used on submarines. The probe used for transesophageal echocardiography is about the size of a normal sized piece of food you might swallow. It is the same size as the tube used to diagnose ulcers.

Why do I need transesophageal echocardiography?

Echocardiography (done through the chest wall) does not always give a clear enough picture of your heart to diagnose your problem. Sound waves have trouble passing through large amounts of body tissue, air, or implanted devices such as artificial heart valves. If something is located deep within the body, or is “hidden” behind implanted devices, it may not be seen by standard echocardiography. Transesophageal echocardiography gives very high quality pictures of the heart. It is used when the doctor wants more information about your heart.

How do I prepare for this test?

Arrange to have someone drive you home after the test. You cannot drive until the day after the test.

To make this test successful and safe, **do not** eat or drink anything after midnight the night before it is scheduled. On the day of your test, it is better if you do not take any medications until after the test; this includes antacids. If you think you must take prescription medication, please check with your primary care provider. If you do take any medications, take them with only a few sips of water. If you have diabetes, check with your doctor or nurse about adjusting your insulin dose.

You will be asked to remove eyeglasses and dentures.

How is the test done?

A small intravenous (IV) tube is started in your arm. A mild sedative will be given through the IV to help you relax and to make swallowing easier. It will not put you to sleep or interfere with your breathing.

A medication, like Novocain, used by dentists, is sprayed onto your throat. Although it has an unpleasant taste it will numb your throat to reduce gagging. You will be given a thick, flavored solution to gargle. This also numbs your throat.

You will be asked to swallow a flexible tube (endoscope) that contains the ultrasound probe. A plastic mouthpiece is placed between your teeth once the tube is in place. This protects the ultrasound probe.

During the test, you will be on your left side.

The entire test lasts between 30 and 45 minutes.

Will it hurt?

The test is not painful, but you may feel some discomfort when you first swallow the probe. Once the tube is in place you should feel very little discomfort.

The tube will not interfere with your normal breathing. However, it is hard to talk with the endoscope in your mouth. Use hand signals to communicate.

What can I do to make the test more comfortable?

Try to relax your muscles, particularly those in your neck and shoulder area. Breathing in through your nose and out through your mouth at a slow, even pace will help your whole body relax.

Special concerns

Be sure to tell the doctor if you have any of the following:

- Problems swallowing
- History of bleeding (especially from the gut)
- Esophageal strictures/varices
- Allergies to medication
- Glaucoma
- Stomach disorder
- Lung disease
- History of hepatitis
- Problems urinating

Where is this test done?

Your doctor will schedule the transesophageal echocardiogram for you and will tell you the date and time of the test. It is done in the Echocardiography Lab at the Minneapolis VA Medical Center.

Is it dangerous?

Any time a device is inserted into the body, there are risks. With transesophageal echocardiography, the risks are extremely small. There is a chance that the medications may have side effects. You may gag and possibly vomit while swallowing the probe. Suctioning equipment is available to clear your mouth.

There is a small chance of damage to the esophagus as the probe is advanced down the esophagus. Transesophageal echocardiography is extremely safe.

How do I find out the results?

You should talk to your doctor about the results and what they mean to you. S/he knows you best and will explain the results to you.

What happens after the test?

You may burp up any air remaining in your stomach.

The medication you were given may make you feel drowsy or cause blurry vision for a few hours. You will rest in the test area until you feel ready to leave.

Plan to stay in the clinic for at least one hour after the test. Then your driver can take you home. ***Do not drive until the day after your test.***

Do not eat or drink anything for at least 60 minutes (1 hour) after the test. This is to make sure that your swallowing reflex is no longer numb. One hour after the test, you may try to swallow a small amount of water. If you can swallow it comfortably, you can eat and take your medications.

You may have a mild sore throat for the rest of the day. Throat lozenges or ice chips will help relieve the soreness.

What should I watch for?

Problems after this test are rare. However, you should know the early warning signs of a possible complication.

Call immediately if you notice any of the following:

- Unusual pain or problems swallowing
- Unusual abdominal or chest pain
- Unusual vomit, similar to coffee grounds, or vomiting blood
- Black or bloody stools
- Temperature above 100.6 degrees F (37.5 C)

If you have questions

Between 8:00 a.m. and 4:30 p.m., Monday through Friday, call the:

Cardiology Nurse at (612) 467-3662

or the

Echocardiography Lab at

(612) 467-3646

After 4:30 p.m. and on weekends and holidays, call your local doctor or Urgent Care at the Minneapolis VA Medical Center, (612) 467-2771.

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