

About Echocardiography

Echocardiography is the use of ultrasound waves to produce an image of the heart's structure and function. A transducer, or modified microphone, turns electrical energy into sound waves, which enables us to view the muscle and valves of the heart. These images are recorded onto videotape or computer disk for analysis.

Echocardiography is primarily used to evaluate the following:

- Cardiac Valve abnormalities (murmurs)
- Cardiomyopathy (enlargement or weakness of the heart)
- Effects from hypertension (high blood pressure)
- Heart attack damage or scarring
- Pericardial disease (the lining that surrounds the heart)
- Congenital (present at birth) heart defects

What to Expect

Echocardiography is performed by a trained sonographer. Throughout the test, an electrocardiogram (ECG) is used to monitor the heartbeat. A gel is used on the chest to improve conduction and reception of the images from the heart.

For **TRANSTHORACIC ECHOCARDIOGRAPHY**, the transducer is moved across the chest to image your heart muscle and valves. Slight pressure may be used on the area being imaged. You may hear a "whooshing" sound, which is the amplified sound of the blood flow through the valves of the heart. The test generally lasts about 30 to 45 minutes.

For **STRESS ECHOCARDIOGRAPHY**, a type of stress test, you will first have a limited transthoracic echo while lying down to obtain the baseline heart images. You will then exercise on a treadmill or peddle a stationary bike until reaching a pre-determined target heart rate, and then exercise is stopped abruptly. At that point, you are asked to quickly get in the same position on the imaging table for a repeat transthoracic echocardiographic while your heart is beating at its maximum point. The risks of treadmill exercise will be reviewed carefully before the test and you will need to sign a consent form for the procedure.

This procedure lasts approximately 30 to 45 minutes.

Pre-Test Guidelines.

For a **TRANSTHORACIC ECHOCARDIOGRAM**, there are no specific directions you need to follow before the test.

For a **STRESS ECHOCARDIOGRAM**, you should only eat a light meal before the test. You should wear flat, comfortable shoes such as sneakers and lightweight shorts or sweatpants for walking on the treadmill.

Post-Test Guidelines

There are no post-test restrictions for transthoracic echocardiography or stress echocardiography.



Echocardiography Is A Valuable Diagnostic Tool

Cardiology Consultants of Westchester, P.C. is dedicated to providing area residents with world class cardiovascular care right in our neighborhood. Providing expertise in Echocardiography is just one more example of our dedication to providing the best medical care possible to you and your family.

Cardiology Consultants of Westchester together with Vascular Associates of Westchester and Primary Care & Cardiovascular Associates, is dedicated to improving the health of our patients by providing the highest quality cardiovascular care in a comfortable, compassionate environment. In addition, we are committed to contributing to the advancement of knowledge in the community through ongoing education and scientific inquiry.

