

## WHAT IS A PHARMACEUTICAL STRESS ECHO ?

Exercise treadmill testing is the standard “screening device” utilized to try to detect the presence or absence of significant coronary artery disease (hardening of the arteries to the heart). For many patients, however, treadmill testing cannot be performed adequately due to arthritic conditions of the hips or knees or sometimes other medical conditions. For these individuals, pharmaceutical stress echocardiography has been developed.

A variety of different pharmaceutical agents may be utilized to “trick” the heart into thinking that it is exercising. These include Dipyridamole, Adenosine, Arbutamine and Dobutamine. The latter medicine is commonly combined with ultrasound technology (echocardiography) to try to assist your physician in determining the presence or absence of coronary artery disease.

It has been shown that heart muscle with poor blood flow may move normally at rest but lose its ability to contract normally during and immediately after an episode of increased heart rate. This loss of contractility may be detected by echocardiography during a pharmaceutical stress echocardiographic study.

### Preparation For The Dobutamine Stress Echo Test:

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- Unless told otherwise do not eat or drink for 3 hours prior to the test.
- Take your medications unless told otherwise.
- Wear loose comfortable clothing. Women will be asked to wear a cape from the waist up.
- Bring a current list of medications with you.



### How Is The Test Done?

- The Dobutamine Stress Echo is performed by obtaining four standard views of the heart at rest and placing the images into a digital computer for analysis at a later time.
- Through an intravenous (IV) line a measured dose of Dobutamine (a medication that stimulates the heart) is administered in stages to stimulate the heart as though you are exercising.
- The heart is monitored with both EKG and echocardiography throughout the test with sample images stored into the computer at various stages.

### After The Test:

- You will be monitored for a short time after the test.
- You will be free to resume your normal activities.

## What To Expect During The Test:

- The test will be explained to you and you will be asked to sign a consent form. Feel free to ask any questions you may have about the test.
- Several EKG electrodes will be applied to your chest.
- An intravenous line will be placed in hand or arm. Dobutamine will be infused in stages to stimulate your heart.
- You will be asked to lie on your left side while the resting images are obtained and will remain in that position for the duration of the exam while echocardiographic images are continuously monitored.

**P**reliminary results are usually available immediately after the test. The final results will be sent to your doctor within a few days. The information that is provided by the stress echocardiogram would help your doctor make an accurate diagnosis and develop a treatment plan. He or she can then go over the results and any needed treatment options in detail.



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# HELENA CARDIOLOGY CLINIC

## PHARMACEUTICAL (DOBUTAMINE)

## STRESS ECHO

## A PATIENT'S GUIDE

