



St. Luke's Imaging Services Patient/Family Information

## **Isotope Ventriculogram (MUGA SCAN)**

### **What is an Isotope Ventriculogram?**

An isotope ventriculogram (which may also be called a radionuclide ventriculogram or a MUGA scan) is a nuclear scan of the heart. With this scan, abnormalities of the heart can be detected. In contrast to x-ray procedures in which the radiation passes through your body, the nuclear scan introduces tiny amounts of a radioactive material into a vein (generally in the arm). The amount used is extremely small and quickly disappears. The amount of radiation you will receive is less than that received in such x-ray procedures as a stomach or GI (gastrointestinal) examination.

### **Special Note**

Before the exam, please inform your doctor if you may be pregnant, or if you are nursing.

### **Preparation**

Please bring your medication list with you to your exam.

There is nothing you need to do to prepare for the exam.

### **Why is an Isotope Ventriculogram Performed?**

An isotope ventriculogram is a technique used to see the chambers of the heart in motion and to evaluate movement of the heart muscle. It also evaluates the heart's pumping efficiency.

### **How Long Does the Procedure Take?**

The procedure takes one hour.

### **Will I Experience Discomfort or Pain?**

The radioactive material for this exam is injected directly into a vein. The discomfort is no more than that associated with a venipuncture (a needle insertion into the vein).

### **How is the Procedure Performed?**

When you arrive in the Nuclear Medicine department, a small blood sample will be taken from a vein in your arm or hand. That blood sample will be labeled with a radiopharmaceutical, taking approximately 25 to 30 minutes. After your initial 25 to 30 minute wait, you will be taken to the imaging room. You will be asked to lie on your back for the procedure. EKG lead wires are attached to your chest to detect your heart rhythm. Information is recorded with each heartbeat.

A second injection into a vein in your arm or hand is necessary to administer the radioactive material. A series of images will then be taken using a gamma camera. This camera detects the radioactive material and forms an image of your heart. Because the heart's chambers overlap, images from three to four directions are taken. You must lie quietly during this procedure.

## **What Happens After the Procedure?**

There are no after effects from the imaging study.

## **Who interprets the results and how do I get them?**

A radiologist will review the images shortly after the exam is completed. A written report will be sent to your doctor. Your doctor will discuss the results with you. Please allow your physician the time needed to review these results.

## **Outpatient Instructions**

Please register at the Outpatient Registration desk at the West Entrance. After registering, testing will be done in the Imaging Services Department on the second floor. Please use the elevators past registration on the left.

Name \_\_\_\_\_

Exam date/time \_\_\_\_\_