# CHEMICAL MYOCARDIAL PERFUSION STUDY SAME DAY REST & PHARMACOLOGIC STRESS

#### **Information for our Nuclear Medicine Patients:**

Inform your physician if you are pregnant or breast feeding.

### What is Nuclear Medicine?

Nuclear Medicine is a medical specialty that uses safe, painless and cost-effective techniques both to image the body and treat disease. Nuclear Medicine imaging is unique in that it documents organ *function* and *structure* in contrast to diagnostic radiology, which is based on anatomy. Nuclear Medicine allows your physician to gather medical information that may otherwise be unavailable.

Nuclear Medicine uses very small amounts of radioactive materials, or radiopharmaceuticals, to diagnose and treat disease. Radiopharmaceuticals are substances that are attracted to specific organs, bones or tissues. The radiopharmaceuticals used in nuclear medicine emit gamma rays, which can be detected externally by special types of cameras called gamma cameras. These cameras work in conjunction with computers, and are used to create images that provide data and information about the area of the body being imaged.

## Chemical Myocardial Perfusion Study using Thallium-201 or Sestamibi

You have been scheduled for a Chemical Stress Test, which involves the use of a small amount of radioactive material. The level of radioactivity used is extremely low and has no side effects. In case you do not reach an adequate heart rate during the study, your physician may substitute a drug (dobutamine, adenosine, or Lexiscan) as a pharmacological form of stress to mimic exercise. You will be positioned next to a special detector called a gamma camera. The camera does not produce any radiation. It will be placed close to the part of your body being imaged.

## **Patient Preparation**

Nothing to eat after midnight before the exam, however, water and fruit juice is okay. You can have no products containing caffeine 24 hours before the exam (No decaffeinated or regular coffee or tea, cola, chocolate, Anacin, Excedrin, etc.). **Bring** your medications **OR** a list of them with you including over the counter medicines. If you take Theophylline or Persantine, notify Nuclear Medicine personnel at the time of scheduling your procedure. Informed consent will be obtained.

#### **Procedure**

Once in the exam room, an I.V. catheter will be started in your arm and you will be injected with a small amount of radioactivity and be asked to wait for a period of time, usually 30-60 minutes. You will be positioned on your back and the gamma camera will rotate around your chest. The scan will take about 20 minutes. At the appropriate time, you will be prepped for an EKG. You may be directed to the treadmill room where electrodes will be placed on your chest to monitor your heart rate, during your test. When your doctor arrives, one of the chemicals above will be infused through the I.V. You may feel slightly flushed or nauseated but these feelings will pass quickly. A second injection of radiopharmaceutical will be injected after the chemical infusion. You will be allowed to eat or drink something at this time. You will then be asked to return to the nuclear medicine department in 45-60 minutes, where a second set of pictures of your heart will be taken. This entire procedure takes approximately 3-4 hrs.

## **Appointment Information**

discussion between you and your physician.

	nis appointment please contact the Nuclea ent at 618-847-8249, at least 24 hours in a	-
Patient Name:	Appointment Date:	& Time:
•	ovided to you courtesy of ( <u>Facility Name</u> ) a This is for informational purposes and is not	- v