

What can I expect from the stress portion of the procedure⁵?

- The stress phase of the exam is usually performed with a pharmaceutical that makes your heart respond as if you were exercising.
- This pharmaceutical is given in your vein through an IV line while an electrocardiogram (ECG) is performed to monitor your heart.
- It is important to let the healthcare professional know if you experience chest pain, shortness of breath, palpitations, headache, dizziness, lightheadedness, or a flushing feeling during the test.

How do i receive the results of my exam?

A doctor trained in the interpretation of cardiac PET exams will review the pictures of your heart and send a report to the doctor who asked you to have the exam.

Is there important safety information I should know about a cardiac PET exam?

Only a doctor can decide if a cardiac PET exam is right for you.

Special precautions may be taken for patients with the following conditions:

- Congestive heart failure
- Diabetes
- Asthma or lung disease
- Female patients who are pregnant, nursing, or think they may be pregnant
- Patients who have recently suffered from a heart attack or stroke
- Patients allergic to caffeine, theophylline, aminophylline, or dipyridamole
- Claudication

It is important that you discuss the medications you are taking with the medical personnel performing your exam.

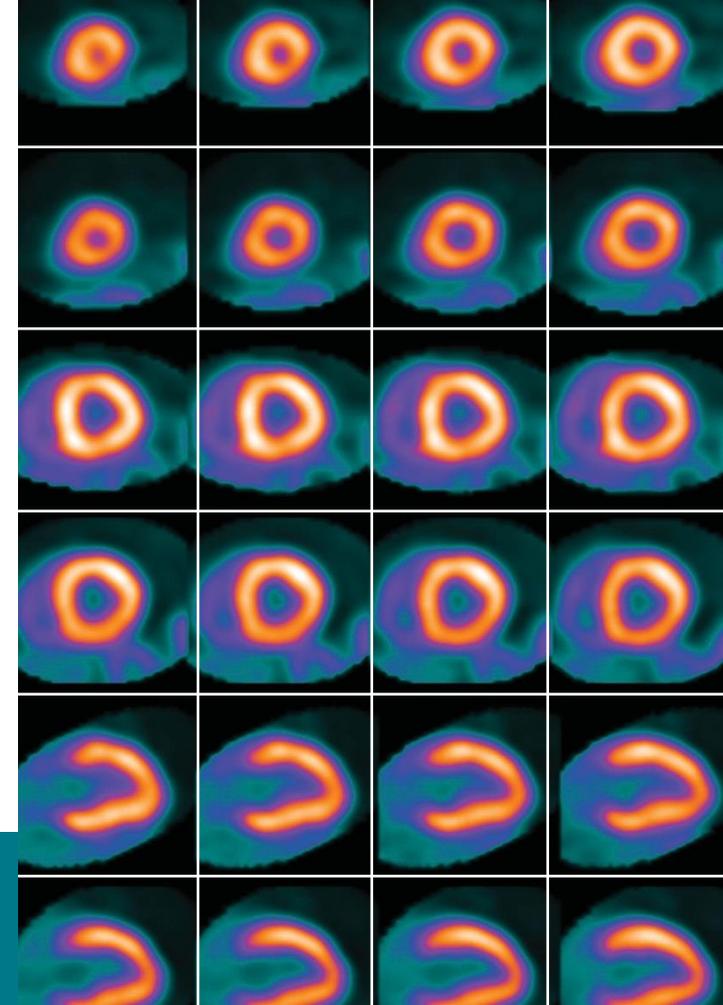
Always inform your healthcare provider about any symptoms you may be experiencing before, during, and after the exam.

Your appointment is scheduled for:

Date: _____

Time: _____

Address: _____



References:

1. American Heart Association, Know the Facts, Get the Stats 2006
2. American Heart Association, Heart Disease and Stroke Statistics-2006 Update
3. National Council on Radiation Protection and Measurements, NCRP Report 100; Exposure of the US Population from Diagnostic Medical Radiation
4. Society of Nuclear Medicine Procedure Guidelines for Myocardial Perfusion Imaging, June 2002
5. http://www.asnc.org/section_92.cfm#A-2
Accessed Dec 19, 2006

DETAIL

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A Patient's Guide to Cardiac PET Myocardial Perfusion Imaging



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What is a cardiac PET exam?

A cardiac Positron Emission Tomography (PET) exam is used by doctors to evaluate the health of your heart by measuring the blood flow that it receives. People who receive this exam may have symptoms and/or risk factors for heart disease. The results of this exam will help your doctor determine if you should have follow-up treatment. If you are already being treated for a heart-related condition, the results of this exam can also be used to help your doctor manage your treatment.



Image courtesy of Siemens Medical Solutions

What is heart disease¹?

Heart disease can be described as a narrowing of the vessels that supply blood to your heart. This narrowing can be caused by a build-up of plaque (fatty deposits). When this happens, blood cannot flow through the vessels normally. Consequently, your heart may not get the oxygen and nutrients it needs.

A reduction in blood flow to your heart may cause:

- Chest pain
- Shortness of breath
- Back, neck, jaw, or stomach pain
- Cold sweats
- Nausea
- Lightheadedness

If you have any of these symptoms, please tell your physician.

What are the risk factors associated with heart disease²?

Heart disease can be a serious condition for both men and women. There are many treatment options and steps you can take to lower your risk of heart disease. Following are some of the common risk factors for heart disease:

- Smoking
- High cholesterol
- High blood pressure
- Obesity
- Diabetes
- Physical inactivity

The more risk factors you have, the greater your likelihood for developing heart disease. A cardiac PET scan can help the supervising doctor determine the presence or absence of heart disease. Additionally, the results of your study can assist him/her in making decisions about how best to manage your symptoms and/or risk factors.



Image courtesy of GE Healthcare

How is the procedure performed?

- Trained medical personnel will be with you throughout the exam.
- You will be asked questions about your medical history.
- An IV line will be placed in a vein in your arm to allow administration of medication during the exam.
- Small pads called electrodes will be placed on your chest so that the medical team can monitor the electrical activity of your heart throughout the study.
- You will be asked to lie on a scanning table made especially for the PET camera.
- A small amount of a radiopharmaceutical will be given through your IV line that will allow the PET camera to take pictures of your heart.
- The amount of radiation exposure you receive is considered safe by the National Council on Radiation Protection and Measurements.³
- A PET camera will take pictures of your heart in two phases: a resting phase and a stress phase. The order in which these phases occur will be determined by the supervising doctor.
- These phases are then compared to allow for the assessment of blood flow through your heart and/or to look for prior damage to the heart muscle.

How long does the procedure take?

- Most cardiac PET exams are completed in less than 1 hour; however, a longer exam should not be cause for concern.
- Ask your doctor for specific details about how long you should plan to be present for your exam.

How should I prepare for the procedure⁴?

You should ask your doctor and follow his/her advice about directions regarding your preparation for the exam.

Here are a few general guidelines:

- You may be asked not to eat or drink anything for a period of time before your test.
- You may be asked not to have any caffeine products for at least 12-24 hours before your exam.
- You may be asked not to take certain medications before the exam.
- You will be asked if you have any allergies. Please be prepared to discuss this with the supervising doctor.
- Wear comfortable clothing and leave your jewelry at home.
- Bring a list of all your medications with you to the exam.



Image courtesy of Siemens Medical Solutions

It is very important that you check with your doctor BEFORE discontinuing any medications.