# **Nuclear Medicine Stress Testing**

# Patient Education & Preparation Instructions

You will be contacted prior to your appointment to provide medical and insurance information as part of our pre-admission process. At your appointment time, please report to the Respiratory Care Department on the second floor of Aspirus Riverview Hospital.

When you are finished in the Respiratory Care Department, you will be given a time to report to Aspirus Riverview Hospital's Imaging Services Department for your Day 1 scan.

Please report directly to Aspirus Riverview Hospital's Imaging Services Department on the first floor of Aspirus Riverview Hospital to complete your Day 2 scan.

**Please Note:** You may spend approximately 3 hours each day at Aspirus Riverview Hospital to complete your testing.

# What Should I Do Before My Stress Test?

- A light meal (toast and juice) may be eaten 3 hours prior to your appointment time.
- No caffeine 12 hours prior to testing. This includes coffee, decaffeinated coffee, tea, soft drinks, caffeine-free soft drinks, and chocolate.
- Wear clothing and footwear appropriate for brisk walking on a treadmill.
- You may need to withhold medications such as beta-blockers. Call your physician if you have medication questions.

# Why Should I Have a Stress Test?

The heart receives blood from vessels called coronary arteries. These arteries may become narrowed or blocked by the accumulation of fatty materials. This narrowing or blockage of the coronary arteries is called coronary atherosclerosis or more commonly, coronary artery disease (CAD). As CAD progresses, the heart muscle may not receive enough blood, resulting in the most common symptom of CAD, chest pain called angina pectoris. Symptoms such as shortness of breath, fatigue with activity and difficulty breathing on exertion may also suggest the presence of CAD. Cardiac stress testing is useful in detecting the presence and significance of CAD.

#### What is Nuclear Imaging?

Nuclear imaging involves the injection of a small amount of a radioactive isotope through an intravenous line (IV). The amount of radioactivity to which you are exposed is very small and poses no danger to you or others. This isotope is detected by a special camera which provides images of your heart. These images will allow doctors to evaluate the blood flow through the coronary arteries and the condition of the heart muscle. Nuclear imaging usually consists of 2 sets of images; stress/exercise images and resting images. The images are usually collected on 2 separate visits as a Day 1 scan and a Day 2 scan. After receiving an injection of this isotope, you will need to wait approximately 1 hour before your images may be collected by the camera. You will spend approximately 3 hours each day at Aspirus Riverview Hospital.

#### What will Happen During My Nuclear Medicine Stress Test?

Several small patches called electrodes will be placed on your chest to allow electrocardiographic (EKG) monitoring of your heart rates and rhythms. Your blood pressures will also be monitored. An intravenous (IV) line will be placed. You will exercise by walking on a treadmill. The speed and elevation of the treadmill will be increased every few minutes. It is important to exercise as long as you are able, as this will increase the accuracy of the test. The radioactive isotope will be injected through the IV line approximately 1-2 minutes before the end of exercise. After a brief recovery period with continued EKG and blood pressure monitoring, most of the EKG electrodes and the IV will be removed and you will be released from the stress testing lab.

You will be provided with the time to report to the Imaging Services Department to complete your first set of pictures (Day 1 scan). You may resume any medications you were asked to withhold for stress testing and return to your normal dietary habits.

### What if I Cannot Exercise?

If you are unable to exercise, a medication called Lexiscan may be used to dilate the coronary arteries in place of exercise.

## What will Happen During a Lexiscan Stress Test?

This test is used for patients who are unable to exercise or unable to exercise to adequate levels. Your heart rates, rhythms and blood pressures will be monitored as explained earlier and an intravenous (IV) line will be placed. You will lie on a cart and receive an injection of a small amount of Lexiscan followed by an injection of the radioactive isotope for nuclear imaging. Side effects experienced during or immediately following Lexiscan administration may include: shortness of breath, headache, flushing, chest discomfort, dizziness, chest pain, and nausea. If side effects persist, other medications may be administered to relieve them.

#### What Should I Do Before a Lexiscan Test?

- Medications containing dipyridamole should be withheld for 48 hours prior to testing.
- Medications containing theophylline should be withheld for 12 hours prior to testing.
- Medications containing caffeine should be withheld for 12 hours prior to testing.
- A light meal (toast and juice) may be eaten 3 hours prior to your appointment time.
- No caffeine 12 hours prior to testing. This includes coffee, decaffeinated coffee, tea, soft drinks, caffeine-free soft drinks and chocolate.
- Call your physician if you have any medication questions.

#### **Contraindications to Lexiscan:**

- Allergy to Lexiscan
- Allergy to Aminophylline
- 2nd or 3rd degree AV block or sinus node dysfunction unless patient has a functioning artificial pacemaker

Aspirus Riverview Hospital Imaging Services Department 715-421-7430

If you are unable to keep your appointment, please let us know by calling one of the following telephone numbers:

Aspirus Riverview Hospital Respiratory Care Department ~ 715-421-7481 Aspirus Riverview Hospital Imaging Services Department ~ 715-421-7430 or 715-422-9385

Should you be admitted to the hospital, please inform your physician about your appointment.



RIVERVIEW HOSPITAL 410 Dewey Street, P.O. Box 8080 Wisconsin Rapids, WI 54495-8080 aspirus.org