Cardiac Blood Pool Scan
MUGA

A cardiac blood pool scan shows how well your heart is pumping blood to the rest of your body. This test is also very useful for finding your "ejection fraction," which is the percentage of blood that is pumped out of your heart's lower chambers (called the ventricles) with each heartbeat. This test is also called the multi-gated acquisition (MUGA) scan. This scan uses the electrical signals of the heart to trigger the camera to take a series of pictures that can be viewed later like a motion picture.

How is it done?

You will have an IV line placed in your arm. A small amount of blood will be withdrawn and then you will be seated in the waiting room while the red blood cells will be "tagged" or "labeled" with a radioactive tracer. This process usually takes about 30 min. Once they are "tagged," your blood, with the tracer, will be re-injected through the IV line and flushed with saline. The IV will be removed at this time. Now it is time to take your pictures.

You will be placed in a chair where there is a special camera attached called a gamma camera. Electrocardiogram (EKG, ECG) electrodes are attached to your chest so that the electrical signal of your heart can be detected. Your arms will be raised and rested on a platform that is very comfortable. Because it is very important to hold still for the pictures, a wide elastic band is placed around your abdomen. The scan will take 15 minutes.

Risks

Allergic reactions to the radioactive tracer are very rare. Most of the tracer will be eliminated from your body (through your urine or stool) within a day, so be sure to promptly flush the toilet and thoroughly wash your hands with soap and water. The amount of radiation is so small that it is not a risk for the people you come in contact with after the test.

Occasionally, some soreness or swelling may develop at the injection site. These symptoms can usually be relieved by applying moist, warm compresses to your arm.

CARDIAC BLOOD POOL SCAN

Normal:

- The ejection fraction is 55% to 65%
- The walls of the ventricles are contracting normally
- The chambers of the heart are not enlarged.

Abnormal:

- The ejection fraction is less than 55%
- Parts of the heart muscle are not contracting normally
- The chambers may be enlarged

Many conditions can affect cardiac blood pool scan results. Your health professional will discuss any significant abnormal results with you in relation to your symptoms and medical history.
Preparation

There is not any special prep for this test. Wear clothing that is comfortable and where we can easily place the electrodes on your chest. Dresses, full slips, bodysuits will not be your best choice. Heavy body lotions is also not a good idea the day of the test. There is also the possibility of having to shave 3 small areas on a man's chest.

We hope that this brochure has helped to explain to you what to expect during your test. If you have any further questions, please feel free to call and speak with the technologist.

Raymond N Fernandez, M.D., F.A.C.C
256-891-8580
4198 US HWY. 431, SUITE A
ALBERTVILLE, AL. 35950-0242