

Heart Scans



Radiology Department

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Nuclear Medicine Supplement:

Please read the pamphlet: **Nuclear Medicine Scans (BCCH1097)** before this sheet.

There are different types of heart scans. They are named for the type of radioactive substance used. Your doctor will decide which kind of scan will be best for your child.

Your child will have:

- **MIBI Rest and Stress:** This shows the blood flow to the heart.
- **MUGA Rest:** These show the quantity of blood pumped out of the heart to the body.
- **First pass:** This study tracks the flow of blood out of the heart and into the blood vessels.

What happens?

MIBI Rest and Stress:

This study is done in two parts: the “stress” on one day and the “rest” on another.

For both parts, the radioactive substance is injected into the intravenous (IV) line by the Nuclear Medicine Technologist.

Here is what happens during the “stress” part of the test:

- Your child will have an IV started in the Nuclear Medicine Department.
- S/he will then go to Cardiology.
- The ECG technician will place the ECG leads on your child’s chest.
- The radioactive substance is injected into the IV

while your child is walking on the treadmill.

- The leads are taken off and your child returns to the Nuclear Medicine Department 1 hour later for the scan. It takes 30 - 60 minutes.

For the “rest” part, the scan begins 1 hour after the injection of radioactive material. For both parts, your child is allowed to eat after the injection.

How to prepare for the test:

If your child is going to have an exercise study:

- S/he must have nothing to eat or drink for 4 hours before the test.
- S/he must be in comfortable clothes.

MUGA Rest: An IV is started in the Nuclear Medicine Department. The technologist draws a small amount of your child’s blood from the IV. S/he combines your child’s blood with the radioactive material. S/he reinjects it about 30 minutes later. Your child lies on the table and the scans begin. They take 60 - 90 minutes.

First pass: During the injection, your child lies on the table. Scans begin right away and take about 15 minutes. After the scan, your child drinks Potassium Perchlorate in a cherry drink. This protects the thyroid which is sensitive to radiation.

What are the side effects?

The radioactive substance will be in the child’s blood and urine for 24 hours after the test. Wear gloves and wash your hands well if you are touching diapers or dressings.