



# Iothalamate Study

*How to prepare for your procedure*

**An Iothalamate study is a lab procedure performed in Nuclear Medicine.**

**This handout explains how to prepare for the scan, how it works, how it is done, what you may feel during the scan, and how to get your results.**

An Iothalamate study is a lab procedure performed in Nuclear Medicine. It involves an injection of a radioactive material, followed by the collection of blood and urine samples over a 4-hour period.

## **What is an Iothalamate study?**

An Iothalamate study is a diagnostic nuclear medicine procedure used to find out your *glomerular filtration rate* (GFR) for each kidney.

## **How does the study work?**

A small amount of a radioactive material, called *radiotracer*, is injected into the muscle of your upper arm. This material is excreted out of your blood, into your urine, by glomerular filtration. By taking samples of your blood and urine over time, we are able to calculate what your GFR is. This gives your doctor information about the health of your kidneys.

## **How do I prepare for the scan?**

- Drink 20 ml of water per kilogram of body weight in the 90 minutes before arriving in the department. For most people, this is about 1 to 2 1-liter bottles of water.
- Drink lots of fluids throughout the 4-hour study. The study may be continued for more time if more urine is needed.
- You need to be able to empty your bladder completely.
- Most patients are required to withhold diuretics the day of the test. Check with your doctor if you take diuretics.
- Do not consume any caffeine the morning of the study.

## Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. Clinic staff are also available to help.

- UWMC Imaging Services:  
206-598-6200
- Harborview Imaging Services:  
206-744-3105

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## How is the study done?

When you arrive at the lab, the technologist will check your blood pressure. You will need to completely empty your bladder into a container. The technologist will also place an IV into one of your veins and take a sample of your blood.

The radioactive tracer will be injected into your upper arm muscle. The technologist will take another blood pressure reading about 10 minutes later.

You will return every hour, for 4 hours. Each hour, the technologist will take a blood sample and ask you to completely empty your bladder into a container. It is very important that you do not go to the bathroom outside of the department.

Throughout the study, you will be required to drink plenty of fluids and avoid caffeine. You will be allowed to eat.

After 5 urine and blood samples are collected, the IV will be removed and you are free to leave. This urine will be analyzed and measured.

## What will I feel during the study?

Most people feel no different than normal during this study. Some people may feel a little shaky after the injection of the radiotracer. This is because a small amount of *epinephrine* is added to the radiotracer to improve its absorption. You may also have minor discomfort from holding your bladder.

## Who interprets the results and how do I get them?

When the test is over, the nuclear medicine doctor will review your processed data, prepare a written report, and discuss the results with your doctor.

Your doctor will then talk with you about the results and discuss your treatment options. Talk to your doctor to find out whether or not you will need to restart any medicines that you stopped for this exam.

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