

## Brain Perfusion Scan

### *How to prepare and what to expect*

*A brain perfusion scan is used to see changes in the blood flow in the brain. This handout explains how to prepare for the scan, how it works, what to expect during the scan, and how to get your results.*

### What is a brain perfusion scan?

*A brain perfusion scan helps diagnose diseases that affect blood flow to the brain. It is a nuclear medicine scan because it uses a radioactive drug called a *tracer*.*

The tracer used in this scan is ordered especially for you. Because of this, we need **at least 72 hours' notice** if you must cancel or reschedule. **If you need to cancel or reschedule your scan:**

- UW Medical Center - Montlake patients: call 206.598.4240.
- Harborview Medical Center patients: call 206.744.0118.

### How does the scan work?

We will place a thin tube called an *intravenous* (IV) line into a vein in your arm. You will receive a small dose of tracer through the IV. This tracer collects in your brain and gives off gamma rays. As the gamma camera detects the rays, it creates pictures and takes measurements of your brain.



*A gamma camera*

### How do I prepare?

- If you have any concerns about stopping medicines before this scan, talk with your doctor.
- Do **not** use marijuana for at least 72 hours before your scan.
- On the day of your scan, avoid caffeine, alcohol, cigarettes, nicotine, sedatives, methadone, cocaine, and other recreational drugs.
- *If you were assigned female at birth:* Tell the technologist if you are breastfeeding or if there is any chance you are pregnant.

## How is the scan done?

- First, the technologist will put an IV line into your arm or hand.
- You will then sit in a room with your eyes open for 5 to 10 minutes. The room will be quiet and the lights will be very low. This will help your brain relax and be ready for the scan.
- We will then give you a small dose of tracer through the IV.
- Imaging will begin about 90 minutes after you receive the tracer. You will need to lie flat on your back while the camera takes pictures of your brain. The technologist will help make you comfortable during the scan.
- You must not move while the camera is taking pictures. If you move, the pictures will be blurry and may have to be done again.
- A gamma camera will detect the gamma rays from the tracer. A computer will use the gamma rays to create pictures of your brain.
- Imaging will take 35 minutes. During this time, you may also have a special type of X-ray called a low-dose *computed tomography* (CT) scan.
- The entire study should take about 1 hour.

## What will I feel during the scan?

- You may feel a little discomfort from the IV.
- Lying still on the exam table may be hard for some people.

## What happens to the radioactive tracer?

Most of the radioactivity passes out of your body in your urine or stool. The rest simply goes away over time.

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

A nuclear medicine doctor will review your images, write a report, and talk with your provider about the results. Your own provider will talk with you about the results of your scan.

You and your provider will then decide the next step, such as treatment for a problem, as needed.

You may also read your results on your MyChart page. If you need copies of your images on disc, call 206.598.6206.

Talk with your provider to find out whether or not you will need to restart any medicines that you stopped for this scan.

### Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- UWMC Imaging Services: 206.598.6200
- Harborview Imaging Services: 206.744.3105