# UW Medicine UNIVERSITY OF WASHINGTON MEDICAL CENTER

# **PET/CT Cardiac Inflammation Scan**

How to prepare and what to expect

This handout gives special instructions for patients who are having a cardiac PET/CT scan to look for heart inflammation such as sarcoidosis. You must follow these instructions for us to do your scan.

## What is a PET/CT scan?

You are scheduled for a *positron emission tomography/computed tomography* (PET/CT) scan of your heart. This scan will check the blood supply to your heart and show if there is any inflammation.

You will receive 2 injections of a radioactive tracer for this scan. The 1st injection will show the blood flow to your heart muscle and help us take clear pictures of your heart. The 2nd injection will show areas of inflammation. It is very rare to have allergic reactions to these tracers.



Your PET/CT scan will show if there is inflammation in your heart muscle.

A PET/CT camera takes 2 types of pictures:

- The **PET scan** shows where the tracer has collected in your body.
- The CT scan provides detailed pictures of your heart tissues and structures.

The PET/CT scan will show if areas of your heart are inflamed. One of the many things that can cause inflammation in the heart is *sarcoidosis*.

## How should I prepare for the scan?

- Call the Nuclear Medicine Clinic at 206.598.4240 before the day of your scan:
  - If you feel you cannot lie flat on your back for 2 hours. (You will need to do this for this scan.)
  - If it is hard to place an intravenous (IV) line in your arm.

- **Starting 2 days before your scan**, do not take any liquid or lollypop medicines. You may take all other non-liquid medicines. Call us if you have any questions.
- Do not exercise for 24 hours before your scan.
- You MUST follow the important food and drink instructions on page 3 of this handout starting the day before your scan.

### **Food and Drink Before Your Scan**

For this scan, you **must** strictly follow the diet instructions on page 3. If you do not or cannot follow the diet, we will need to reschedule your scan.

The reasons for the diet restrictions are:

- All cells in your body need energy to work well. Healthy heart muscle
  cells use *glucose* (sugar) as their main source of energy. When you do
  not eat foods that provide your body with glucose, healthy heart
  muscle cells start to use fat as their fuel supply instead of glucose. But,
  inflamed heart muscle cells cannot use fat for fuel. Inflamed cells can
  only use glucose as their main source of energy.
- By following the diet restrictions, you deprive your body of glucose. When you do this, your healthy heart muscles cells will start to use fat for energy. Your inflamed heart cells will use glucose for energy.
- For the part of this scan that looks for inflammation, radioactive glucose is injected into your vein. Only the inflamed areas of your heart will take up this radioactive glucose. The pictures of your heart we take on the PET/CT camera will show where the radioactive glucose is.

## The Entire Day Before Your Scan

You MUST follow food and drink instructions starting the day before your scan. The boxes on page 3 list what to eat and drink:

- The **entire day before** your scan (Step 1)
- Starting **12 hours before** your scan (Step 2)

Call us at 206.598.4240 if you have questions about what you can and cannot do before your scan.

The food and drink instructions on page 3 are VERY important. If you eat or drink any foods that are not listed, call us at 206.598.4240 to reschedule your scan.

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You MUST eat fats and proteins the day before your scan. Do NOT fast. Do NOT eat any carbohydrate foods.

# THE ENTIRE DAY before your scan, eat **ONLY** proteins and fats.

#### **Eat ONLY:**

- Plain meat (beef, steak, pork, chicken, or lamb), fish, and eggs. You may cook the meat in oil, if you wish. NO bacon, deli meats, or other processed meats.
- VEGANS: Eat ONLY plain tofu that has been cooked in oil (added fat is needed).
- "Plain" means NO sauces, seasonings, dressings, or breading.

#### **Drink ONLY:**

 Water or plain black coffee. NO milk, cream, sugar, or other sweeteners.

#### **Medicines:**

• NO chewable, liquid, or lollypop medicines. Take all other medicines with water.

# DIET STEP 2



Follow these instructions starting 12 hours before your scan.

# **Starting 12 HOURS** before your scan:

- Do NOT eat anything.
- You may drink water or plain coffee. NO milk, cream, sugar, or other sweeteners.
- Do NOT take any chewable, liquid, or lollypop medicines. You may take all other medicines with water.
- If you have diabetes: **Starting 6 hours before** the study, do NOT take insulin or other diabetes medicines.

## **IMPORTANT!**



- You MUST eat proteins and fats the day before your scan. Do NOT fast.
- Do NOT eat or drink anything that is not listed above.

We must reschedule your scan if you do not follow these instructions exactly.

# The Day of Your Scan

- **Please arrive on time.** The exact timing of this scan is very important. If you are more than 20 minutes late, we may need to reschedule your scan.
- Wear comfortable clothes.

## **How to Find Us**

The Nuclear Medicine Clinic is on the 2nd floor of UWMC. From the main lobby on the 3rd floor (main level):

- Take the Pacific elevators down to the 2nd floor.
- Follow the signs to Radiology.
- · Check in at the Radiology front desk.

## What to Expect

When you arrive at the Nuclear Medicine Clinic, a technologist will talk with you about what you can expect during your scan. **Plan to be at the hospital for up to 2 to 2½ hours for this procedure.** 

Here is what you can expect:

- An intravenous (IV) line will be started in your arm.
- We will check your blood sugar.
- The nuclear medicine technologist will inject the tracer.
- The technologist will use a PET/CT scanner to take pictures of your heart. This will take about 20 minutes. These images will show us how much blood reaches your heart.
- After these first images are taken, you will be injected with another radioactive tracer. You will need to remain lying on your back during this time between scans.
- More images of your heart will be taken 1 hour later. These images will take about 20 minutes.

## Who reads the scan? When will I get the results?

A nuclear medicine doctor or nuclear cardiologist, or both, will read your PET/CT scan. Within 3 days, the doctor will send your results to your provider who referred you for this scan. Your provider will then share your scan results with you.

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

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

## **Questions?**

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

UWMC Imaging Services: 206.598.6200

UWMC Nuclear Medicine: 206.598.4240