



Kaiser Permanente Santa Clara Nuclear Medicine Department PET/CT Patient Information

Appointment Information:

Date: _____

Time: _____

PET/CT is a newer imaging tool that is highly advanced. PET/CT combines 2 different types of imaging into 1 procedure. It is a very good tool for detecting cancer and how far it has spread. It can help the doctor decide on the best course of treatment for a patient. PET/CT also can show how the cancer is responding to treatment.

This patient education sheet tells you how PET/CT works. It also tells what you need to do when you have a PET/CT scan procedure.

What is PET?

“PET” stands for positron emission tomography. PET creates an image (scan) of your body’s biochemical activity. PET shows the rate at which your body’s cells break down and use sugar (glucose). This activity is called metabolism. Cancer cells metabolize sugar at a higher rate than normal cells do. A PET scan shows this abnormal cell activity. For your PET scan, a small amount of radioactive material is injected into your blood stream. This material is called a radioisotope.

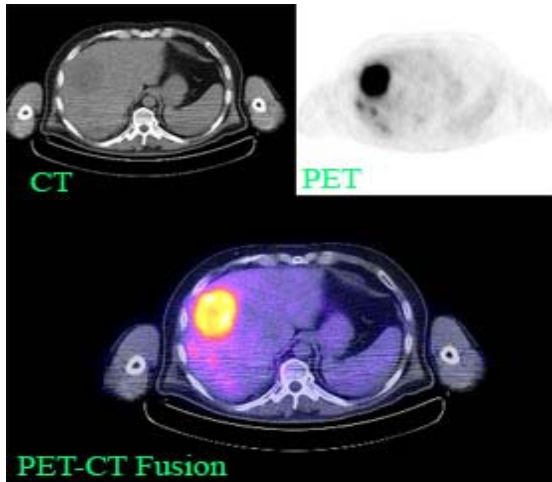
The PET scanner detects the radioisotope and then creates an image on the computer screen. PET exposes you to a very low level of radiation.

What is CT?

“CT” is short for computed tomography. CT uses x-rays to make an image of various sections of your body. A CT scan shows your body’s organs, bones, and tissues in greater detail than regular x-rays do. CT exposes you to a small amount of radiation.

What does PET/CT do?

A PET image is color coded—different colors show various levels of cell activity. A CT scan shows the exact locations of the body’s organs and also can show abnormal growths. When a CT scan is laid over a PET scan, doctors can pinpoint the exact location of abnormal cell activity. They can also see the level and extent of that activity. Even when an abnormal growth is not yet visible on a CT scan, the PET scan can show the abnormal cell activity.



How do I prepare for my PET/CT exam?

- Before the day of your exam, the nuclear medicine department will call you. You will be instructed about what medicines you may take.
- If you have diabetes, please inform us. Your blood sugar level should be below 200 mg/dl when you arrive for your exam. Otherwise, your exam may need to be rescheduled. If you take insulin, please inform the scheduler as to the typical daily routine for administration of your insulin.
- **DO NOT EAT ANYTHING** for at least 6 hours before the exam. You may drink only water. Do not eat gum, candy, breath mints, vitamins or any form of sugar 6 hours before the test or the test may be cancelled.
- Wear loose-fitting, comfortable, warm clothes to the test. The imaging room is kept cool. Avoid wearing clothing with buttons, zippers or attached metal. Sweat shirts and sweat pants are recommended. Leave your watch, jewelry, and other valuables at home. You may be asked to change into a hospital gown.
- If you are pregnant or think you might be, or if you are breast-feeding, tell your doctor or technologist before the exam.
- **DO NOT** schedule any other nuclear medicine exams for the same day as your PET/CT exam.
- **DO NOT** exercise or lift weights 48 hours prior to your PET/CT appointment. Muscle activity can interfere with the test.
- Plan to be at the testing center for 2 hours on the day of your PET/CT exam. It is very **important** to arrive on time at the testing center. If you are late, the exam may be cancelled because of time constraints.
- If you **cannot** come to the testing center at your scheduled time, please **call 24 hours in advance to cancel your test.**
- If you have a fear of enclosed spaces (claustrophobia), tell your doctor before the day of your PET/CT exam. Your doctor may prescribe medicine to help you relax.



What happens on the day of the exam?

An IV will be inserted into your arm. You will receive the radioactive glucose through the IV. Then you will rest quietly for an hour while it moves through your body. There are no side effects from the injection.

What happens during the exam?

You'll be asked to empty your bladder, and then you will go to the scanning room. The PET/CT scanner is a machine that does PET and CT scanning in the same procedure. It has a large, deep ring – like a donut standing on its side. A scanning table will move slowly through the ring.

The technologist will help you onto the table and position you as comfortably as possible. You must be able to lie very still on the table with your arms over your head for the entire test, which takes about 30-45 minutes. Please let the technologist know if you have any shoulder or back problems which might prevent you from lying in this position.

The technologist will go into a room behind a glass window. The technologist can see and hear you at all times during scanning and may give you added instructions. The scan is painless; you should not feel anything.

What happens after the exam?

Most of the radioisotope will collect in your bladder. After the exam, you should drink plenty of fluids to flush it out of your body. You may resume your normal diet and activity.

How do I get my results?

The doctor who ordered the exam for you will discuss the results with you. Check with your doctor about how and when you will get your results

Questions and concerns

Some anxiety before and during a test is normal. However, a PET/CT exam should not be a fearful experience for you. Feel free to express any concerns about your PET/CT exam. Please ask the medical staff any questions you may have.

If you need assistance the day of the exam, please call 408-851-5638.

Please report to the Nuclear Medicine, Department 120 for this appointment in the main Hospital at 700 Lawrence Expressway, Santa Clara.

From North or South via Highway 101:

Exit onto Lawrence Expressway heading south. Follow Lawrence Expressway to Homestead (for approximately 4 miles). The hospital is on the right.

From North via Interstate 280:

Exit onto Wolfe Road. Turn Left onto Wolfe Road. At the third stoplight, turn Right onto Homestead Road. Go forward. At the second stoplight, turn Right. This is the main road into Kaiser Permanente Santa Clara. At the stop sign, turn left. On the left is free Valet Parking.

From the East Bay via Interstate 680 or 880: Take Highway 237 and exit southbound onto Lawrence Expressway. Follow Lawrence Expressway to Homestead (for approximately 5 miles). The hospital is on the right.

Once you have parked in the PET Parking Lot (Lot A), make your way to the walkway between the Homestead West Lobby and the Main Hospital. You will see a glass walkway connecting the hospital with the Medical Office Building (MOB). Enter into the hospital underneath the glass walkway. This is the Hospital Courtyard Lobby.

Once you are in the Hospital Courtyard Lobby, continue forward down the hall. There is a volunteer station to your left if you have any questions. When you reach the end of this hallway, turn right and walk to Nuclear Medicine, Department 120.

A map of the facility is on the next page.