Why a PET/CT Fusion Scan?

Malignant (cancerous) cells require more energy, in the form of glucose, than benign, healthy cells because they are more metabolically active. Therefore, when radioactively tagged glucose, Fluorodeoxyglucose, is administered intravenously, high concentrations of it will collect in malignant tissues. The FDG emits radioactive particles that the scanner can detect thus highlighting areas of malignancy.

A CT (computed tomography) scan is acquired simultaneously to the PET (Positron Emission Tomography) scan. The CT scan, analogous to a 3-dimensional x-ray, provides a detailed view of the anatomy. When the CT and PET scans are fused, a comprehensive image is revealed which is used to assess the size, location and extent of the disease.

PET/CT fusion images offer a non-invasive means of obtaining both physiologic and anatomic information. Often PET/CT will reveal certain disease processes earlier than a CT or MRI would. Note that the amount of radiation exposure from a PET/CT scan is well within safety limits and there are no side effects.

PET/CT scans are becoming the standard therapeutic tool for detecting and detailing metastases and for detecting early recurrence. It is utilized to evaluate the benefits of treatment protocols and for precise localization for biopsies and radiation therapy.

“We comfort our patients and their referring physicians by providing outstanding diagnostic services and compassionate care”
To ease your concerns regarding your PET/CT fusion scan, please review the following outline. It will help you prepare for the scan, and it should answer most of your questions. Do not hesitate to call for additional information.

How to prepare for your PET/CT scan:

1. Limit your carbohydrate intake for 24 hours prior to your PET/CT scan. Here are some suggestions of what you can eat: meat, fish, cheese, eggs, grapefruit, lettuce, tomato (raw), mushrooms, asparagus, cabbage, cucumber, celery, cauliflower and sugar free beverages. You should avoid milk, nuts, cereals, fruits and vegetables (unless listed above), sweets, breads, potatoes, rice, pasta, juices, oatmeal, baked goods and gum.

2. We encourage you to drink about 8 glasses of water during the 6 hours before your scan. It is very important that you do not eat or drink anything else during this period.

3. You may take all of your medications on the day of your scan. Diabetic patients: On the morning of your scan you may take your oral medications, but do not take insulin. Eat a low carbohydrate dinner (see above) on the evening before your scan. Drink plenty of water on the morning of your scan. Good hydration is very important.

4. Avoid caffeine for 24 hours before your scan.

5. Do not engage in strenuous activity during the 24-hour period before your scan. Your normal daily activity does not need to be restricted.

6. For your convenience, you may wear your clothes during your scan if they do not contain metal such as snaps or zippers. Otherwise, we are happy to provide you with hospital scrubs. We have lockers for you to store your belongings.

7. The PET/CT scanner operates optimally in a cool environment. For your comfort we will provide you with a heated blanket. You may also want to bring a sweater or sweatshirt.

8. Please bring the following items on the date of your scan:
   a. Diagnostic imaging reports (e.g. MRI, CT, nuclear scans) from the past 12 months that pertain to your diagnosis
   b. Driver’s license
   c. Insurance card(s)

9. Please note that this test will require 2 to 2 1/2 hours.

10. We will give you a courtesy reminder call on the day before your appointment.

What to expect on the date of your appointment:

1. Please arrive on time. You will have a few minutes to complete some paperwork. If you feel you may require more time than that, please arrive earlier. You can also complete your paperwork at home if you have a computer with Adobe Acrobat software and a printer.

b. Click on Patient Guide and then follow the instructions.
c. Then, print your forms, fill them out and remember to bring them with you on the date of your appointment.

2. At your scheduled injection time, the technologist will accompany you to one of our injection rooms. If you arrive with friends or family members, we will do our best to keep them comfortable while they wait for you. They can enjoy our television, snacks, coffee and magazines. Our Annandale Center has a very comfortable Family Waiting Room next door to our main office. We will let your guests know when you are ready to leave.

3. The technologist will check your blood sugar level by taking a droplet of blood from your finger. Then, you will be given an intravenous injection of a sugar-based substance called Fluorodeoxyglucose F18 (FDG). FDG is a radioactive tracer that enables the PET/CT scanner to assess your body’s utilization of glucose. Each dose of FDG is precisely regulated for administration at your scheduled injection time. The dose diminishes rapidly and is very expensive so please do not be late for your appointment. This is very important.

4. After receiving your injection, you will remain in your injection room for approximately 60 minutes. This will give the FDG sufficient time to distribute throughout your body. The lights in the uptake room will be dimmed to help you relax. Please be prepared to lie still during the ‘uptake’ time. There is no television, music or magazines in the injection room. This is intentional because any external stimulation can effect the way your body utilizes the FDG. Please use this time to close your eyes, lie still and relax.

5. After your uptake period, the technologist will escort you to the scanner bed. The PET/CT scanner consists of a large tube that is open at both ends. You will be asked to lay on your back with your arms over your head. The scanning bed will then slowly move through the tube.

6. Your scan will take approximately 20 - 40 minutes depending on the type of scan your physician requested. It is important to remain still during your scan.

7. After your scan you will be asked to remain in our waiting room for approximately 15 minutes while our technologist checks the quality of your images.

8. We know you are fasting so at this time we will provide you with some snacks and a drink to make you more comfortable.

9. The report of your scan will be faxed to your referring physician within 24 hours. The report, images and a CD of your scan will also be sent to your referring physician.

10. We kindly ask that requests for a personal copy of your report be directed to your referring physician.

Payment & Insurance Information:

a. The specifics of your particular insurance plan as well as your diagnosis dictate your insurance company’s coverage guidelines for PET/CT scans. Unfortunately, some diagnoses are not consistently covered for PET/CT scans. We will discuss this with you when you schedule your appointment. Our billing team will do its best to collect payment from your insurance company, but please note that denied claims are ultimately your financial responsibility.

b. We will bill you for any remaining balance that results from a co-pay, co-insurance or deductible.

c. Payment options are available if requested.

Early appointments: (Annandale Center only)

1. The main entrance opens at 6:00am. If the doors are still locked when you arrive for your early morning appointment, please note the following:
   a. There is a directory at the main entrance to the building.
   b. On the bottom of the directory is a touchtone pad similar to the number pad on a telephone.
   c. Press the # key.
   d. When you hear a tone, dial 050.
   e. Our receptionist will answer and then buzz you into the building.

Parking:

Both of our Centers offer free parking. At our Chevy Chase facility, please use the parking garage in the rear of the building. Bring your parking ticket to our office for validation.

Cancellations:

It is imperative that you cancel your appointment at least 24 hours prior to your appointment so we can cancel your FDG dose.

Why Metro Region PET Center?

In the 10 years since its inception, Metro Region PET Center’s physicians have read in excess of 43,000 scans. Worldwide, this level of experience is nearly unparalleled. We supplement this diagnostic expertise with a staff that is compassionate and sensitive to our patients’ needs.

We know this may be a difficult time. Please let us know if there is anything we can do to make your experience with us as simple and stress free as possible.

Sincerely,

The Staff of Metro Region PET Center and Woodburn Nuclear Medicine