



Positron Emission Tomography (PET scan)

- This test uses a positron emitting radionuclide (a chemical with special properties) that is taken up by particular tissues and accumulates in these areas of the body. It is different from a scintigraphy scan because of the type of radiation used, which requires a different detector. The following are examples of where PET scanning is used.
 - the diagnosis of certain cancers and their spread
 - following removal of cancer by surgery or radiotherapy to ensure complete eradication
 - in certain seizure disorders
 - in patients with certain memory difficulties, to analyse brain function
 - in patients with poor heart function
- You will be usually required to fast for a few hours before your PET scan, in order to eliminate any surplus sugar from your bloodstream. If you are diabetic, you will receive instructions on how to change your medication.
- In order to prepare for the test you should wear loose clothing and remove any objects (eg necklaces, body piercings) that may interfere with the test. Please bring relevant past CT/MRI/PET scans with you. Depending on the area of body that is being examined, you may be asked to change into a hospital gown.
- The PET scan will be performed by a nuclear medicine technologist who is trained in the procedure and taking the most appropriate images. S/he will inject the appropriate tracer into a vein. As the radionuclide requires time to accumulate in the area of interest, you will need to rest quietly for one hour after the injection. You will then lie on a table and a special detector will pass around you and capture the emitted rays. You will need to remain as still as possible so that adequate pictures can be acquired. This information is then analysed by a computer and images are produced for review.



- The PET scan is a painless and safe procedure. You cannot feel the radiation. You will be exposed to radiation but the risk is negligible compared to the information obtained from the scan. The radionuclide is safe and is quickly removed from the body by the kidneys. You will be encouraged to drink lots of fluids to assist this. As with any test there are small risks;
 - Please inform your doctor if you are or think you may be pregnant.

- Once you have had your scan, return to your referring doctor to discuss the results. The nuclear medicine physician (specialist in nuclear medicine) will have had an opportunity to review the scan and issue a report, based on the history provided by your doctor on the request form. Depending on where you are referred from, you may be able to have a hard copy of your scan or a CD for future reference.

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