What is Nuclear Medicine imaging?

Nuclear medicine imaging uses a scanner to detect radiation from different parts of the body after very small amounts of radioactive materials are given to the patient. Nuclear medicine is used to examine organ and tissue function.

What is Nuclear Medicine imaging?

By measuring the behavior of the radionuclide in the body, we can assess and diagnose various conditions. These conditions include: tumors, infections, hematomas, organ enlargement or cysts. A nuclear scan may also be used to assess organ function and blood circulation.

Preparing for a Nuclear Medicine exam

- Radioactive materials used in nuclear medicine are, in most cases, injected into a vein before the exam. For some studies, they may be given by mouth.
- The radioactive substance, called a radionuclide (radiopharmaceutical or radioactive tracer), is absorbed by body tissue.

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- After the radionuclide has been given and has collected in the body tissue under study, radiation will be given off. This radiation is detected by a radiation detector.
- The most common type of detector is the gamma camera. Digital signals are produced and stored by a computer when the gamma camera detects the radiation.

Preparing for a Nuclear Medicine exam

- Unless you have metal in the area of interest, you will likely not need to change.

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What to Expect during a Nuclear Medicine exam

- Once in the scanning room, you will lie flat on a table that slides into the scanner. During the procedure, the scanner will move close to you.
- During this time, it is important that you lie still. The technologists will be in constant contact with you throughout the procedure.

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Important Nuclear Medicine safety information

- The amount of radiation a patient receives in a typical nuclear medicine scan tends to be very low and is comparable to a diagnostic X-ray.
- Radioactive materials given for nuclear medicine scans are not dyes or medicines. They do not have any side effects.

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