



Radionuclide (Scintigraphy) Scan

- This test uses a radioactive isotope (of which there are several types) that emits gamma rays from the body after it has been injected. The following are instances where a radionuclide test might be performed.
 - Visualising the heart and its blood supply
 - Detecting cancer deposits in the bones
 - Detecting bone or joint injury not seen on other imaging tests
 - Detection of hidden infections
 - Detecting blood clots in the lung
 - Determining the function of the kidneys
 - Determining function of the thyroid gland
- A radionuclide is a chemical that emits gamma rays. There are different types of radionuclides, each with a unique property to accumulate in specific tissues. Therefore different radionuclides are used in specific circumstances. The gamma rays produced are similar to Xrays and are detected and analysed by a computer to produce an image.
- In order to prepare for the test you should wear loose clothing for comfort and remove any jewellery (eg necklaces, body piercings, rings) that may interfere with the test. Please bring previous relevant scans (including Xrays) with you. Depending on the area of body that is being examined, you may be asked to change into a hospital gown. The scan may take anywhere from 30 minutes to several hours to complete, depending on the type of test.
- The radionuclide 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 may be asked to return in a few hours or even the next day. You will then lie on a table, and a special detector will pass around you to capture the gamma 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.



- Except for the injection, the radionuclide scan is a painless and safe procedure. You cannot feel the gamma rays. You will be exposed to radiation in most cases and the dose is dependant on the test being perfumed. The risk of the radiation is negligible compared to the information obtained from the scan. The radionuclide is safe and is quickly removed from the body, usually by the kidneys. You will be encouraged to drink lots of fluids to assist this. As with any test there are small risks;
 - You may have an allergic reaction. These are extremely rare and usually very mild.
 - Please inform your doctor if you are or think you may be pregnant.

- Once you have had your scan, return to your local 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 to your doctor, based on the history provided by your doctor on the request form. Depending on the practice of the radiology firm to whom you are referred, you may be able to have a hard copy of your scan or a CD for future reference.

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