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1. WHAT ARE RADIOACTIVE TRACERS?

They are chemical compound in which one or more atoms have been replaced by a radioisotope. Monitoring it's RADIOACTIVE decay, a radiotracer can be used to explore the mechanism of reactions. These carried molecules vary greatly depending on the purpose of the scan. Some TRACERS employ molecules that interact with specific protein or sugar in the body and can even employ the patients own cells.

For most diagnostic studies in molecular medicine ,the RADIOACTIVE trader is administered to a patient by intravenous injection. However, a radioactive tracer may also be administered by inhalation. By oral ingestion, or by direct injection into the organ . The mode of tracer administration will depend on the disease process that is to be studied.

2. One application of TRACERS in medicine

SPECT (single photon emission computed tomography

This imagining instrument provides three dimensional images of the distribution of radioactive tracer molecules that have been introduced into the body into the patient's body the 3D images are computer generated from large number of projection images of the body recorded at different angles. SPECT imagers have Grammaray emission from the tracers.