

## **BREAST TUMOR IMAGING USING 99m-TECHNETIUM TETROFOSMIN**

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The most widely used radiotracers for breast tumor imaging are Tc- 99m MIBI and Tc -99m Tetrofosmin. Both of them were introduced for myocardial perfusion imaging and then proposed as tumor seeking agents. They have significant dosimetric and physical advantages over the radiofarmaceutical previously used for tumor imaging.

Patients were injected intravenously cubitaly in the arm opposite of the side of suspicious breast lesion. It is very important to avoid even a minimally paravenous administration which may effect the difficulties in the interpretation of scans. In certain cases patients were injected in the pedal vein .

Scans were started 10 minutes after injection of 18 mCi Tc-99m Tetrofosmin. Images were acquired in prone lateral position with the patient laying prone and the homolateral arm raised. Anterior supine projection was obtained with arms raised above the head including in the field of view breast, axilla, supraclavicular region and sternum, minimizing the counts from liver and bowel by using the thin lead shield over patient's belly. Static planar images were obtained using a 128x 128 matrix with a large field camera, equipped with a high resolution collimator. Seven minutes scans and /or at least 2.0. million counts were taken.

Scintmammography (SMM) is not a screening test for breast cancer. After a physical examination, standard mammography (MM) and ultrasound have been performed, SMM may help clinicians to determine whether or not a patient with suspicious breast lesion requires surgical biopsy. Method is noninvasive and easy to perform.