

## 99mTc Scintimammography in an Equivocal Breast Lesion

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**Abstract :** Introduction: Early detection of breast cancer is the main tool to decrease morbidity and mortality rates. Many diagnostic tools are used, such as mammograms, ultrasound and magnetic resonance imaging, but none of them is conclusive, especially in very small sizes, less than 1 cm. So, there is a need for more accurate tools. Patients and methods: This study involved 13 patients with different breast lesions. 6 Patients had breast cancer, and one of them had metastatic axillary lymph nodes without clinically nor mammographically detected breast mass proved by biopsy and histopathology. Of the other 7 Patients, 4 of them had benign breast lesions proved by biopsy and histopathology, and 3 Patients showed Equivocal breast lesions on a mammogram. A volume of 370-444Mbq of (99m) Tc/ bombesin was injected. Dynamic 1-min images by Gamma Camera were taken for 20 minutes immediately after injection in the anterior view. Thereafter, two static images in anterior and prone lateral views by Gamma Camera were taken for 5 minutes. Finally, single-photon emission computed tomography images were taken for each patient. The definitive diagnosis was based on biopsy and histopathology. Results: 6 Patients with breast cancer proved by biopsy and histopathology showed Positive findings on Sestamibi (Scintimammography). 1 out of 4 Patients with benign breast lesions proved by biopsy and histopathology showed Positive findings on Sestamibi (Scintimammography) while the other 3 Patients showed Negative findings on Sestamibi. 3 Patients out of 3 Patients with equivocal breast findings on mammogram showed Positive Findings on Sestamibi (Scintimammography) and proved by biopsy and histopathology. Conclusions: While we agree that Scintimammography will not replace mammograms as a mass screening tool, we believe that many patients will benefit from Scintimammography, especially women with dense breast tissues and in the presence of breast implants that are difficult to diagnose by mammogram, wherein its sensitivity is low and in women with metastatic axillary lymph nodes without clinically nor mammographically findings. We can use Scintimammography in sentinel lymph node mapping as a more accurate tool, especially since it is non-invasive.

**Keywords :** breast., radiodiagnosis, lifestyle, surgery

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