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Breast parenchymal activity on scintimammography: Comparison between bone-seeking agents and ^{99m}Tc-sestamibi

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The aim of this study was to evaluate breast parenchymal activity on scintimammography with bone-seeking agents and ^{99m}Tc-MIBI. Scintimammography was performed with bone-seeking agents in 61 patients and with ^{99m}Tc-MIBI in 33 patients. Activity in the breast parenchyma contralateral to the suspected lesion was visually assessed by two independent observers. Increased breast parenchymal activity was shown in 19 of 61 patients examined with bone-seeking agents, while it was demonstrated in only two of 33 patients examined with ^{99m}Tc-MIBI. Breast parenchymal activity of bone-seeking agents was higher in patients aged 50 years or younger than in those older than 50. Increased parenchymal activity of bone-seeking agents may disturb visualization of primary breast cancer especially in relatively young patients. Low parenchymal activity is suggested to be a favorable characteristic of ^{99m}Tc-MIBI as a scintimammographic agent.

Key words: scintimammography, breast parenchyma, 99mTc-sestamibi, 99mTc-MDP