

## POSSIBILITIES OF SCINTIMAMMOGRAPHY IN DIFFERENTIATION BENIGN FROM MALIGNANT BREAST TUMORES IN PREOPERATIVE DIAGNOSTIC

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Breast cancer takes the first place of all malignant tumors in female population, and takes the second place in mortality, after the lung cancer. Incidence increased over the last few years for 3 % per year, 1 of 9 women affected by this disease.

The question is, can scintimammography as a functional, visual method help to increase specificity and sensitivity of diagnostic methods (mammography) in preoperative diagnostic of breast tumors?

**AIM:** Differentiation benign from malignant breast tumors.

**MATERIAL:** 82 female patients were included in our study with palpable breast tumor to who scintimammography was done and who underwent surgery with PH verification. All patients were divided in 3 groups. **I group** (n=69) included patients with palpable breast tumor suspected to malignancy. **II group** (n=3) were patients who underwent surgery with PH verified malignancy, and with suspected tumor recurrence. **III group** (n=10) were patients with benign breast changes.

**METHOD:** Scintimammography was done with  $^{99m}\text{Tc}$ -MIBI with an activity of 555MBq, 10 minutes after intravenous application in the cubital vein on the contralateral side where the breast changes were detected. Gamma camera Orbiter 45 Siemens and Siemens e.cam double headed camera was used. The patient is in prone position. The images were obtained in lateral and anterior position of both breasts.

**RESULTS:** In **I group** 54 pts/69 pts, scintimammography was TP (78%), TN in 8 pts/69 pts (12.9 %), FN in 3 pts/ 69 pts (4.3%), FP in 4 pts/69 pts (5.7 % ). In **II group** 1 pts/3 pts scintimammography was TN (33.3%), in 2pts/3 pts was TP (66.6%). In **III group** 8 pts/10 pts scintimammography was TN (80%), in 2 pts/10 pts was FP (20%). **SE-** 94%, **SP-** 73%, **A** – 89%.

**CONCLUSION:** Based on an achieved results, we proved the high sensitivity, specificity and accuracy of the method, so we can conclude that the scintimammography findings can be very helpful as accessory method in a differentiation between benign and malignant breast tumors and should have a place in preoperative evaluation of palpable breast tumors.