

Dilemma of False Negative Mammograms in Breast Cancer Patients

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Background: Breast cancer is the most common cancer in women and the second cause of mortality after lung cancer. Mammography is an effective tool in detecting both clinically occult and palpable breast cancers. However, a good number of breast carcinomas may not appear on the mammogram. The false negative rate for conventional mammography worldwide is 10% - 30%¹. There are very few studies addressing the results of mammography in Bahrain.

Objective: To estimate the incidence of false negative mammograms and the possible causes of false negative results in our group of breast cancer patients.

Setting: Salmaniya Medical Complex (SMC).

Design: Retrospective study.

Method: One hundred forty-six mammograms for breast cancer patients were reviewed from January 2000 to May 2011. The mammograms were divided into three groups according to the mammographic report, into malignant, suspicious and benign. Both malignant and suspicious (BIRADS 4, 5, & 6) reports were considered positive mammograms and were excluded from the study. The eleven mammograms, which were reported as benign (BIRADS 1, 2, & 3) and considered negative, were included in the study.

Result: The false negative mammograms were 11 (7.5%).

Conclusion: The incidence of false negative mammograms in this study is lower than international figures. False negative mammograms are more common in small sized tumors, located in upper outer quadrant, big breasts, single or un-experienced mammography reader and mostly in conventional than digital mammography.