Accommodation of ultrasonography and mammography findings with pathologic results in breast cancer

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Abstract

Breast cancer is one of the most popular diseases. Ultrasonography (US) and mammography are accepted radiologic devices to screen and diagnose breast cancers. A retrospective cross sectional study in order to evaluate breast US and mammography findings based on BI-RADS model was conducted in comparison with definitive pathology reports by referring to patients’ archived medical files. Finally, 126 patients underwent study examination. Total sensitivity, specificity, PPV and NPV for US (mammography) were 69.8(91.9), 71.9(76.6), 75.6(80.8) and 81.3(94.6) percent, respectively. Drawing ROC curve for either US or mammography showed that BI-RADS 4 was the most sensitive and specific cut point for malignant breast lesion. Despite greater cumulative sensitivity and specificity for mammography than US in screening breast lesions, considerable concordance between these two approaches was found. We concluded that both US and mammography are reasonable sensitive and specific screening methods for breast cancer that uneventfully accommodate each other.

Biography

Hajian A has achieved his medical physician certification in 2013 from Qom University of Medical Sciences, Iran. He is now learning as general surgery resident in Kashan University of Medical Sciences, Iran. He has published up to 10 medical articles in different fields which cited 20 times.

Publications
