عنوان مقاله:

?Elastography Ultrasound for Breast Tumors : Gland-to-Lesion Strain Ratio or Fat-to-Lesion Strain Ratio

محل انتشار:

مجله تحقیقات سرطان, دوره 7, شماره 3 (سال: 1402)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

Introduction: To evaluate the diagnostic efficiency of the gland-to-lesion strain ratio versus the fat-to-lesion strain ratio for breast tumor diagnosis. Methods: The prospective study included ۳۷۵ breast masses in ۳۳۰ patients. B-mode ultrasound and elastography were performed for each mass. The gland-to-lesion strain ratio and fat-to-lesion strain ratio of the masses were calculated. The elasticity score of the lesions was also evaluated. The area under the curve, sensitivity, and specificity were calculated to compare the gland-to-lesion strain ratio with the fat-to-lesion strain ratio. Histopathological examination was considered the gold standard for final diagnosis. Results: Three hundred and seventy-five breast masses were included in our study (۲۹۸ benign and ۷۷ malignant). The gland-to-lesion strain ratio (GLR) and fat-to-lesion strain ratio (FLR) of the malignant lesions were significantly higher than those of benign lesions (P<۰.۰۰۰۱ for both). The sensitivity and specificity of fat-to-lesion strain ratio were significantly better than gland-to-lesion strain ratio, (sensitivity, ۹۶.۱% versus ۷۲% and specificity, ۹۳.۳% versus ۸۱.۱%). The area under the curve values for the fat-to-lesion strain ratio (۰.۹۹۰) and the elasticity score (۰.۹۷۲) were significantly higher than those for the gland-to-lesion strain ratio (۰.۸۲۰) (P < ۰.۰۰۰۱). However, there was no significant difference between the area under the curve of the fat-to-lesion strain ratio and the area under the curve of the elasticity score (P=۰.۶۴). .Conclusion: The fat-to-lesion strain ratio provided better diagnostic performance than the gland-to-lesion strain ratio in breast mass characterization

کلمات کلیدی:

Breast, Elastography, Elasticity score, FLR, GLR