

عنوان مقاله:

The importance of diffusion weighted imaging in breast MRI

محل انتشار:

دوازدهمین کنگره بین المللی سرطان پستان (سال: 1394)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

Aim: the aim of this study was to evaluate the value of diffusion weighted imaging in Diffusion weighted imaging in distinguishing between in benign and malignant breast lesion **Materials and methods:** There were 37 female patients with 47 lesions. Sixty seven female subjects (40 mean age) ,age ranges 17-69 , with histopathologically proven breast lesions underwent DWI of breasts with a single shot echo planar imaging (EPI)sequence .the computed mean apparent diffusion coefficients (ADCs) of the breasts lesion and cell density were then correlated . **Results:** The ADC varied substantially between benign breast lesions ($(1.52 \pm 0.26) \times 10^{-3}$ mm²/second). And malignant breast lesions ($(0.94 \pm 0.21) \times 10^{-3}$ mm²/second) .The AUC with ROC analysis was 0.896 and the threshold for ADC was 1.17×10^{-3} mm²/s with a sensitivity and specificity of 90% and 85%, respectively. The mean ADC of malignant breast lesions was statistically lower for benign lesions ($p < 0.01$) **Conclusion:** The ADC would be a effective parameter in distinguishing between malignant and benign breast lesions

کلمات کلیدی:

Apparent diffusion coefficient, breast cancer, breast imaging, diffusion-weighted imaging

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