

عنوان مقاله:

Evaluation the FLAIR Sensitivity and DWI Post-inject in Comparison with Delayed Enhancement T1w for Better Detection of Active MS Lesions

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خلاصه مقاله:

Background: Multiple sclerosis (MS) is a chronic, typically progressive and most common autoimmune disease which damaged the central nervous system. According to the reports in ۲۰۰۸, this disorder has affected ۲ and ۲.۵ million people globally. While the reason is not clear, proposed causes for this include immunologic, environmental, infectious and genetic factors, and sexuality. MS can cause many symptoms, including blurred vision, loss of balance, poor coordination, slurred speech, tremors, numbness, extreme fatigue, problems with memory and concentration, paralysis, blindness, and more. There are four distinguished illness fields in MS: relapsing-remitting MS (RRMS), primary-progressive MS (PPMS), secondary-progressive MS (SPMS), and progressive-relapsing. MRI is a great tool to identify the asymptomatic distribution of lesions in space and time. Materials and Methods: ۳۲ patients with MS plaques were evaluated by FLAIR and DWI pre- and post-Gadolinium injection compared with ۱۵minutes delay T1w SE. Results: FLAIR post-inject had significantly better detection of the number and signal intensity of active MS lesions. DWI and ADC images detected active plaques different from non-active lesions without contrast. Conclusion: The result of this study showed that FLAIR post-inject had the highest sensitivity in detection of active MS lesions due to the CSF signal suppression in FLAIR, thus offering enough TR time recovery in active enhanced plaques.

کلمات کلیدی:

Multiple Sclerosis, MRI, FLAIR, Contrast media

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