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خلاصه مقاله:

Background and objective: Magnetic resonance imaging (MRI) is the most sensitive technique to detect multiple sclerosis (MS) plaques in central nervous system. In some cases, the patients who were suspected to MS, Whereas MRI images are normal, but whether patients don't have MS plaques or MRI images are not enough optimized enough in order to show MS plaques? The aim of the current study is evaluating the efficiency of different MRI sequences in order to better detection of MS plaques.Materials and methods: In this cross-sectional study which was performed at Shohada-E Tajrish in Tehran - Iran hospital between October, ۲۰۱۱ to April, ۲۰۱۲, included ۲۰ patients who suspected to MS disease were selected by the method of random sampling and underwent routine brain Pulse sequences (Axial T۲w, Axial T۱w, Coronal T۲w, Sagittal T۱w, Axial FLAIR) by Siemens, Avanto, ۱.۵ Tesla system. If any lesion which is suspected to the MS disease was observed, additional sequences such as: Sagittal FLAIR Fat Sat, Sagittal PDw-fat Sat, Sagittal PDw-water sat was also performed.Results: This study was performed in about ۵۲ lesions and the results in more than ۱۹ lesions showed that, for the Subcortical and Infratentorial areas, PDWw sequence with fat suppression is the best choice, And in nearly ۳۳ plaques located in Periventricular area, FLAIR Fat Sat was the most effective sequence than both PDw fat and water suppression pulse sequences.Conclusion: Although large plaques may visible in all images, but important problem in patients with suspected MS is screening the tiny MS plaques. This study showed that for revealing the MS plaques located in the Subcortical and Infratentorial areas, PDw-fat sat is the most effective sequence, and for MS plaques in the periventricular area, FLAIR fat Sat is the best choice.

کلمات کلیدی:

Multiple Sclerosis, MRI, PDW fat suppression, PDW water suppression, FLAIR

لینک ثابت مقاله در پایگاه سیویلیکا: