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## Can Demyelinative Lesion Cause To Behaviora Change?

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**Abstract :** Multiple Sclerosis (MS) is one of the most prevalent demyelinating diseases in CNS. As in other chronic cerebral diseases, impairment in cognitive functioning and in memory is popular. Because of the inflammatory and demyelinating nature of the disease, the localization of plaques in different parts of the Prefrontal and Limbic System, may lead to memorial symptoms. This investigation was intended to study relationship between frequency of plaques and memorial symptoms arising from dysfunction limbic system and prefrontal of patients with MS. The sample was selected randomly from patients with MS with memory problem, who have been referred to Isfahan Multiple Sclerosis Society. Brain System Test and Memory Test was administered to the sample, and their MRI's were analyzed by specialist in order to indentify two different parts of plaques. The data was analyzed by SPSS. The results showed that there were significant relationship between MS plaques and prefrontal's dysfunction and memorial symptom related to prefrontal area; however, there were no significant relationship between MS plaques and limbic system's dysfunction and memorial symptoms related to limbic system area. The results of this study suggest that memorial symptoms due to injury regions of the brain have the most significant relationship to prefrontal. Better judgment about these results needs more studies in future.

**Keywords:** multiple sclerosis, magnetic image, brain injury, behavior disorder

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