

## What factors are associated with olfactory dysfunction in patients with multiple sclerosis?

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**Introduction:** Impaired sense of smell has remarkable value in quality of life and has a great prevalence in some neurodegenerative diseases. In this study we assessed the olfactory dysfunction in patients with multiple sclerosis (MS) by means of sniff magnitude test (SMT).

**Material and methods:** a cross-sectional study was conducted on 48 patients with MS. After taking clinical history and performing physical examination, a questionnaire including demographic and clinical variables completed for each patient. The SMT was used for evaluation of olfaction. The Data analyzed by SPSS edition 16.0 statistical software.

**Results:** the olfactory dysfunction was found in 14.6% of patients, including 8.3% hyposmia and 6.3% anosmia... The older age, higher duration of MS and count of the admission in hospital, lower mini mental status examination score and type of secondary progressive MS had significant relationship with olfactory dysfunction.

**Conclusion:** Olfactory dysfunction in patients with MS is associated to more severe disease and lower cognitive function. Thus olfactory function may use as a marker of severity of neurologic disability in these patients and routine screening of olfaction in workup of MS patients is recommended.

On the other hand, because of prescence of similar olfactory dysfunction in other neurodegenerative disorderes, SPMS maybe a neurodegerative process and not an immune disorder.

**Keywords:** Multiple sclerosis, olfactory dysfunction, sniff magnitude test