Gender based epidemiologic survey of multiple sclerosis patients: A report from Isfahan province, Iran

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Knowledge about gender-based characteristics of multiple sclerosis is important to find new strategies for further management. Patients' sex can be an important risk factor for incidence and also prognosis of disease. The aim of this epidemiologic study is to evaluate the gender based clinical and imaging differences among MS patients. Study done in Isfahan Kashani referral MS center. Overall, 1781 patients enrolled. The epidemiological questionnaire including 6 areas (patients demographics, Family history, MS diagnosis, course of disease, disability and complications, treatment) filled. Pathological findings of the first brain MRI reported by neuroradiologist in 500 cases (120 men vs 380 women). 75.9% were female with mean age of 36.66±9.94 and the others were male with mean age of 36.60±10.40 years. The mean of disease duration and EDSS didn't differ. The age at disease onset was higher in men with 32.95 ±12.31 years. Smoking (cigarette and hookah) was more popular in male patients. The history of head trauma, type 2 diabetes, pulmonary disease, hypothyroidism and autoimmune disorders were more prevalent in females. Among signs of MS, both optic neuritis and motor disturbance were higher in females. There were not any statistical differences between type of drugs. In the first brain MRI, infratentorial and thalamic lesions were more prevalent in men but early cortical atrophy and tumefactive lesions were reported more in women. The role of sex and genetic, beside to the environmental factors, is important in incidence and prognosis of MS. Since there is not any specific diagnostic test for MS, considering gender-based characteristics can be helpful in management.