



Incidence of Cerebral Venous Thrombosis in Iranian Women: A Longitudinal Two-Year Study in Zanjan Province of Iran

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ABSTRACT

Background and Aim: Cerebral venous thrombosis (CVT) is a disease with high potential of disability and high rates of mortality. It affects females more than males. The estimated annual incidence of CVT is 3 to 4 cases per 1 million, but the incidence rate is much higher in Iran. It particularly increases in Ramadan and Zilhijjah months of the Islamic calendar. We hypothesized that the use of contraceptive components especially during the month of Ramadan is associated with an increase in the risk of CVT in women.

Materials and Methods: A longitudinal descriptive study was conducted from 2010 to 2011 including two consecutive months of Ramadan in Zanjan Province of Iran. The data of 32 female patients with verified CVT, including demographic variables and main CVT risk factors was obtained from hospital records and interview with patients' families.

Results: The annual incidence rate for women in all age groups and child-bearing age was 31.5 and 49 per 1,000,000, respectively. The incidence trends of CVT are increased in concordance with ageing (p-value =0.01). 26 patients (81.25%) reported a history of contraceptive use as a main CVT risk factor. History of OCP administration was 15 times more likely than non-OCP to be vulnerable for CVT (p-value <0.05). More than half of the cases (56.25%) occurred in the month of Ramadan (p-value <0.05).

Conclusion: The higher incidence rate of CVT in Zanjan province more than the statistics cited in the literature is related to the higher incidence of CVT in women but not in men. Use of contraceptive components by women in Ramadan, Hajj times or pilgrimage to postpone their menstruation should be considered by healthcare system to control the incorrect use of them among Muslim women.
