Cerebral Venous-Sinus Thrombosis: A Case Series Analysis

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Abstract

Background: Cerebral venous-sinus thrombosis is an uncommon form but important cause of stroke, especially in young-aged women.

Methods: We performed a retrospective descriptive-analytical study in which 124 patients with cerebral venous-sinus thrombosis, who referred to Nemazee Hospital, Shiraz University of Medical Sciences from January 2000 to March 2008, were included, and their demographic, etiologic, radiological and prognostic characteristics were evaluated.

Results: The patients' mean age was 34.01±10.25. Eighty seven (70.16%) were women and 37 (29.83%) were men. The most frequent clinical manifestations were headache, papilledema and seizures. Fifty seven (65.51%) women took oral contraceptive pills. Twenty of 57 women (35.08%) took the pill longer than one month to be able to fast in Ramadan or perform the Hajj ceremonies. In the mean time they developed cerebral venous-sinus thrombosis. Superior sagital sinus, with or without lateral sinuses, was the most involved area (70.96%). High mortality and morbidity rates (14.51% and 35.48%, respectively) were found in patients. Poor prognostic factors at the time of admission were stupor and coma (P=0.001) and evidence of hemorrhage in primary CT scan (P=0.005).

Conclusion: Taking oral contraceptive pills was a main factor associated with cerebral venous-sinus thrombosis. Clinical manifestations, prognostic factors, common involved sinuses and image findings of this study were similar to those of other studies. Health care policy makers should design a plan to warn susceptible women of the risk of cerebral venous-sinus thrombosis, and to educate them the ways to prevent it.

Keywords ● Intracranial sinus thrombosis ● oral contraceptives ● stroke