Cerebrovascular Disease in the Postpartum Period

To the Editor:

Trommer et al. recently reported a patient who experienced focal cerebral ischemia in the postpartum period. They concluded that the changes present on angiography were a manifestation of vasospasm secondary to eclampsia.

Brick recently reported a similar case in which a young normotensive woman also experienced focal neurologic deficits in the postpartum period. Angiography revealed a stenotic lesion in the left middle cerebral artery that had resolved by the time of repeat study 11 weeks later. Based on experimental studies demonstrating that female reproductive hormones can induce intimal hyperplasia in experimental animals, it was proposed that the action of female reproductive steroids on the vessel wall. This may also be the etiology of the angiographically demonstrated “vasospasm” reported in the case of Trommer et al.

John F. Brick, MD
Department of Neurology
West Virginia University School of Medicine
Morgantown, West Virginia

References


The following is in reply:

To the Editor:

We appreciate Dr. Brick’s comments regarding a possible etiologic role for female reproductive steroids in the vasculopathy demonstrated in our patient with postpartum eclampsia and focal cerebral ischemia. A “hormonal factor” was also postulated to play a role in the postpartum cerebral angiopathy described by Brick et al. in which headache, vomiting, seizures, and/or stroke were accompanied by diffuse segmental narrowing and dilation of cerebral vessels in the absence of eclampsia.

We have recently had occasion to care for a previously healthy 34-year-old woman who developed headache, hypertension, and a right frontal intracerebral hematoma without subarachnoid hemorrhage approximately 1 week following total abdominal hysterectomy and treatment with estrogens (Premarin). Angiography revealed diffuse bilateral vasospasm (later shown to be reversible) in branches of the middle and posterior cerebral arteries and showed no evidence of vascular malformation. These findings suggest that efforts to comprehend the influence of hormonal alterations on the cerebral vasculature merit further pursuit.

Barbara L. Trommer, MD
Daniel Homer, MD
Michael A. Mikhael, MD
Departments of Neurology, Pediatrics, and Diagnostic Radiology
Northwestern University Medical School
Evanston Hospital
Evanston, Illinois

References


Decline in the Incidence of Stroke

To the Editor:

In past years, there have been interesting reports about stroke mortality and incidence. According to these reports, stroke mortality has declined in many countries.1-4 However, the decline in the incidence of stroke has been reliably reported only in the prospective population studies from Rochester, Minnesota.5,6 The question remains whether this decline has also occurred elsewhere. The answer seems to be yes since a decline in stroke incidence has also been detected in the Espoo-Kauniainen area of Finland. When the two population-based prospective stroke registers of Espoo and Kauniainen7-9 were age-adjusted to the same population and statistical differences between incidences were calculated according to the method of Schoenberg,10 the total stroke incidence declined 26% during the 8-year period (Table I) while that in men decreased 29%. The main reason for this decline was the decrease in intracerebral hemorrhages.

Since my findings show that the incidences of all categories of stroke in both men and women were lower in 1978–1980 than in 1972–1973, it would be interesting to know whether the incidence of stroke is also decreasing in other countries.

Mervi Kotila, MD
The Finnish Heart Association
Helsinki, Finland

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J F Brick

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