

## Postpartum Headaches

*Case History Submitted by Randolph W. Evans, MD*

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**Key words:** postpartum headache, estrogen, cerebral venous thrombosis

(*Headache* 2001;41:731-732)

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Although postpartum headaches are usually benign, secondary pathology should be considered and excluded as appropriate.

### CLINICAL HISTORY

This 35-year-old woman, gravida 2, para 2, underwent an elective cesarean section after an uneventful pregnancy. The first postpartum day she developed a mild, bitemporal, throbbing headache which increased in intensity over a few hours and was associated with nausea and light sensitivity but no visual symptoms. She had no neck or eye movement discomfort. Ibuprofen decreased the headache, but it lasted the entire day. She did not have a headache the following morning, but developed a similar headache in the afternoon which was better by evening with ibuprofen. On the third day postpartum, she awoke around 1 AM with a similar headache which lasted about 15 hours. On evaluation, she had been headache-free for 3 hours.

For the last 5 years, she has had bitemporal throbbing headaches associated with nausea and noise sensitivity, occurring two to three times per day, relieved by acetaminophen. She had no headaches during her pregnancy. Past medical history was unremarkable. Blood pressure on examination and

postpartum was normal. She was afebrile. Neurological examination was normal. A computed tomography (CT) scan of the brain without contrast, obtained by the obstetrician, was normal.

**Question.**—What is your diagnosis?

### EXPERT COMMENTARY

This patient probably suffers from postpartum migraine. These headaches most often occur between day 3 and day 6 postpartum. A study of 71 women revealed that postpartum headache occurred in 27 (39%) during the first postpartum week.<sup>1</sup> In another study, 4.5% of women had the new onset of migraine during the postpartum period.<sup>2</sup> Postpartum migraine occurs more often in women with either a personal or family history of migraine and tends to be milder than their usual attacks, but severe and repeated attacks can occur. In this case, the well-defined, bitemporal, mild-to-moderate attacks; the lack of associated neurological deficit; normal CT scan; and prior history of migraine are reassuring and are consistent with migraine triggered by rapidly falling estrogen levels.

Postpartum tension-type headache and migraine, as in the case of other primary headaches, should always be a diagnosis of exclusion. Several neurological disorders associated with the postpartum period must be considered. A low-pressure, postlumbar puncture headache complicating epidural anesthesia is fairly common and is usually present within the first 48 hours after the procedure. This headache is easily identifiable and characteristically has a postural component appearing in an upright position and resolving after lying down. This headache is self-limited in du-

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ration and lasts less than 5 days in about 80% of women. Preeclampsia with onset in the postpartum period can also be a cause of headaches.<sup>3</sup> (It should be noted that as many as 45% of cases of eclampsia have a postpartum onset.) Other conditions that are associated with pregnancy and the postpartum period include pituitary and other intracranial tumors, subarachnoid hemorrhage, meningitis, and cerebral venous thrombosis (CVT).<sup>4,5</sup>

Ninety percent of cases of CVT occur during the puerperium, most commonly in the second or third week postpartum. Headache, which can be persistent or episodic, is present in 80% of cases and is often the initial manifestation. Magnetic resonance imaging, especially when combined with magnetic resonance venography, is the best diagnostic test. A CT will only demonstrate direct evidence of CVT (mainly the empty delta sign) in about one third of cases.<sup>6</sup>

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