Meningioma in a Woman Receiving Hormone Therapy

Key words: cerebral neoplasm, meningioma, dydrogesterone

Figure 1. Brain MRI demonstrating a tumor with hydrocephalus on the cerebellar tent. The tumor was visualized as an isointensity signal on both T1-weighted image (left) and T2-weighted image (middle), and homogeneously enhanced on gadolinium-enhanced T1-weighted image (right).

A 36-year-old woman was admitted because of nausea and dysarthria in May 2003. She failed to become pregnant for two years after her marriage at the age of 28, and was diagnosed as having a primary infertility by her gynecologist in 1997. She was placed on endocrine therapy with 50 mg of clomifene for 5 days for induction of ovulation and 5 mg of dydrogesterone for 14 days after ovulation in each menstrual cycle from 1997 to 2003. MRI scan revealed a sharply demarcated tumor to the right of the midbrain with hydrocephalus (Fig. 1). The tumor was iso intense to the grey matter in both T1- and T2-weighted images, and was enhanced homogeneously with a broad-based dural tail which abutted on the cerebellar tent (dural tail sign). Meningioma was suspected, and the tumor was resected by surgery. The diagnosis was confirmed by histological examination.

Meningiomas predominantly occur in middle-aged women. Several reports have described that meningiomas grow faster during pregnancy. Therefore, it has been hypothesized that female sex hormones promote the growth of these tumors. In our case, dydrogesterone is likely to have accelerated the growth of her meningioma.

Yoriko Murata, Seisho Takeuchi*, Shoji Yoshida and Isao Miyoshi**
The Department of Tumor Radiology, *General Clinic Center and **Medicine, Kochi Medical School, Kochi University, Nankoku
Received for publication August 25, 2003; Accepted for publication September 20, 2003
Reprint requests should be addressed to Dr. Yoriko Murata, the Department of Tumor Radiology, Kochi Medical School, Kochi University, Kohasu, Oko, Nankoku, Kochi 783-8505