NEUROMYELITIS OPTICA LESION MIMICKING BRAINSTEM GLIOMA

A 12-year-old girl who presented with weakness of the left extremities and right sided sixth cranial nerve palsy had neuromyelitis optica (NMO) mistaken for brainstem glioma on MRI, in a report from Brain Research Institute, Yonsei University College of Medicine, Seoul, Republic of Korea. Right optic nerve atrophy diagnosed 10 months previously was unexplained. Admission MRI showed a right-sided pons lesion with high signal intensity on T2-weighted images, low signal intensity on T1-weighted images, and no enhancement after gadolinium. Following treatment with steroids and fractionated radiation, the left hemiparesis gradually improved, but a follow-up MRI showed no change in the size of the brainstem lesion. She was readmitted 2 months later with sudden loss of vision in the left eye and right arm paresthesiae in C3-4 dermatomes. Fundus exam revealed right optic atrophy and left optic neuritis. Brain MRI was unchanged. Spine MRI showed multiple signal changes at C-4 and T8-9 compatible with acute myelitis. CSF was normal and was negative for oligoclonal bands. MR spectroscopy showed a mildly elevated choline level, compatible with a demyelinating disease. Serum autoantibody marker NMO-IgG was positive. Immunosuppressive therapy with corticosteroids and azathioprine resulted in some improvement in vision in the left eye and marked reduction of paresthesiae. Plasmapheresis was of no benefit. Readmitted in respiratory distress 18 months later, the MRI showed lesions in the cervicomedullary junction. Despite artifical respiration the patient died of pulmonary failure. (Park KY, Ahn JY, Cho JH, Choi YC, Lee KS. Neuromyelitis optica with brainstem lesion mistaken for brainstem glioma. Case report. **J Neurosurg (3 Suppl Pediatrics)** September 2007;107:251-254). (Reprints: Jung Yong Ahn MD, PhD, Department of Neurosurgery, Yongdong Severance Hospital, 146-92, Do-gok-dong, Kangnam-gu, Seoul, 135-720, Rep of Korea. E-mail: jyahn@yumc.yonsei.ac.kr)

COMMENT. The diagnosis of NMO was suspected following the progression of neurological signs, 4 months after the initial presentation. The positive serum autoantibody NMO-IgG is diagnostic, with more than 90% specificity for patients with an optic-spinal syndrome. MR spectroscopy may be helpful in the differentiation of a demyelinating lesion from brainstem glioma. The mild elevation of choline in NMO is the result of increased levels of myelin breakdown products. In brainstem glioma, MR spectroscopy demonstrates decreased levels of N-acetylaspartate and elevated levels of choline and creatine.

HEADACHE DISORDERS

SUSTAINED BENEFIT OF 6-MONTH TOPIRAMATE TREATMENT FOR MIGRAINE

The effects of discontinuing topiramate after a treatment period of 6 months in 818 patients with migraine, enrolled from 88 clinics in 21 countries in Europe, the UK and Turkey, are reported from University Duisburg-Essen, Germany. Patients were mean age 39.8 years, 13% male and 87% female. Patients received topiramate in a 26-week open-label