Trigeminal neuralgia due to cerebellopontine angle lipoma

Case illustration

SUAT E. ÇELIK, M.D., HASAN KOCAELI, M.D., TEOMAN CORDAN, M.D., AND AHMET BEKAR, M.D.

Department of Neurosurgery, Uludag University School of Medicine, Bursa, Turkey

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This 32-year-old man presented with an 8-year history of left-sided trigeminal neuralgia (TN). As seen in Fig. 1, magnetic resonance (MR) imaging of the cranium revealed a hyperintense mass lesion on both T_1- and T_2-weighted images in the left cerebellopontine angle (CPA). A left suboccipital retrosigmoid approach disclosed a yellowish mass that encased the seventh and the eighth cranial nerves. The fifth cranial nerve was found to be displaced ventrally by the tumor. There were no vascular elements causing compression along the course of the trigeminal nerve. Approximately 40% of the tumor was removed but the seventh and the eighth cranial nerves were obviously traumatized. Postoperatively, the patient reported complete relief of TN but noted left-sided facial paralysis and deafness.

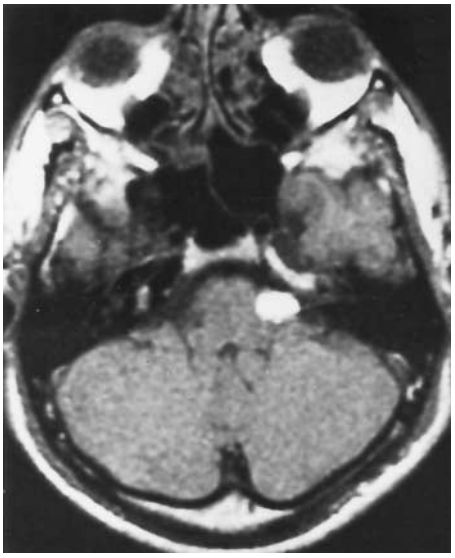

FIG. 1. Axial T_2-weighted MR image revealing a lipoma at the left CPA.

Intracranial lipomas are uncommon; only 0.1% of brain lesions are fatty tumors.[2] Of the 46 CPA lipomas reported, only seven cases have presented with TN.[3] Lipomas usually occur at junctions between segments of the central nervous system, and these junctions represent sites of neural tube flexion as well as of redundant meninx primitiva.[1] This finding supports the concept of lipoma formation as a result of abnormal persistence and maldifferentiation of the meninx.

Surgery for CPA lipomas is quite controversial because of the difficulty of total removal of such a slow-growing lesion. Adherence to the adjacent cranial nerves is the major reason for increased postoperative morbidity, as was seen in our case.[1,3] Malignant differentiation or rapid growth have never been reported.[4] We conclude that surgery should be reserved for tumors that are truly symptomatic or if biopsy sampling is required for differential diagnosis.

References

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Address reprint requests to: Hasan Kocaeli, M.D., Department of Neurosurgery, Uludag University School of Medicine, 16059, Görükle, Bursa, Turkey. email: neurobur@uu20.bim.uludag.edu.tr.