Osteoblastic meningioma of the lateral ventricle

Case illustration

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This 28-year-old woman complained of a 15-month history of headache and diplopia. On admission, neurological examination revealed a left-sided homonymous hemianopsia and left-sided trochlear and facial nerve palsy of the central type. Brain computerized tomography (CT) and magnetic resonance (MR) imaging demonstrated a well-defined calcified mass within the right lateral ventricle (Fig. 1 left and center). A right temporal craniotomy was performed. The dura was opened and a 4-cm incision was made in a sulcus between the central and superior temporal gyrus. The lesion was localized in the trigone of the right lateral ventricle. It appeared bilobular, reddish due to ependymal covering, and rock hard. In its medial and deep portion, the mass was attached to the venous vessels and the choroid plexus. These adhesions were carefully dissected without sacrificing the surrounding structures, and the lesion was totally removed in one piece. A control CT scan demonstrated complete removal of the tumor (Fig. 1 right). The immediate postoperative course was uneventful, and at her 1-year follow-up visit, the patient was completely free of symptoms. Histological examination revealed that the tumor had the characteristic features of an osteoblastic meningioma (Fig. 2).

Intraventricular meningioma is a rare occurrence, comprising only approximately 0.5 to 2% of intracranial meningiomas. These tumors occur more frequently in patients older than the age of 30 years, especially in patients in their third to sixth decades of life. The lateral ventricle is the most common location in adults, whereas the third or fourth ventricle is the more common location in children.

According to some authors, these tumors may arise from the stroma or the arachnoid of the choroid plexus. Osteoblastic meningiomas are rare subtypes of meningioma consisting of mesenchymal differentiation, and only 19 cases have been so far reported in the literature, including intracranial and spinal meningiomas. To our knowledge, osteoblastic meningioma of the lateral ventricle has not been reported previously.

References