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Case Report

Cerebellar vermian epidermal cyst

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through a suboccipital approach. The patient was discharged without any neurological deficit. We describe the clinical picture, MRI and operative findings of the case.

Case report

A 54-year-old male patient presented with episodes of gait unsteadiness for two weeks in absence of any history of headache, vomiting, tinnitus, difficulty in hearing and limb weakness. Examinations revealed no neurological deficit. Cerebellar signs were absent.

Plain and CEMRI brain revealed an epidermoid cyst in the fourth ventricle, with a hint of its vermian location, as evidenced by the displacement of the roof of the fourth ventricle upward and the brain stem forward (Fig. 1).

Through a suboccipital craniectomy, the encapsulated epidermal cyst (Fig. 2), developed from the cerebellar vermis, without any attachment to the floor of the fourth ventricle, could be totally removed (Fig. 3).

At the end of six months, the patient is asymptomatic.

Introduction

From the first description of an epidermoid cyst in 1807 by an artist in a French medical school, intracranial epidermoid cysts have been encountered in neurosurgical practice frequently, enough to constitute 0.2%–1.0% of all intracranial tumours. Epidermoid cyst arising from the cerebellar vermis occur very rarely, with only two cases reported in the literature^{1,2} so far. We report a case of an epidermoid cyst arising from the cerebellar vermis, growing into the fourth ventricle, with the floor of the fourth ventricle being completely free, allowing a complete excision of the tumour

Discussion

Although there are only about 100 reported cases of epidermoid tumours in the fourth ventricle, this location is the second most common site for an epidermoid tumour in the posterior fossa. Fourth ventricle epidermoids present higher operative risks because of their adhesion to the brain stem. To avoid damaging vital structures, a subtotal resection is usually

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Fig. 1 – Plain and CEMRI brain: showing a mass lesion occupying the fourth ventricle, pushing the roof of the fourth ventricle upwards and the brain stem forward. The lesion is heterogeneously isointense to CSF in T1WI (A) and T2WI (B) and hyperintense on DWI (C). The lesion does not show any enhancement in the Contrast enhanced Axial (D), Coronal (E) and sagittal (F) section images.

performed to alleviate compression of adjacent structures, with most cases having an overall good prognosis.³ Epidermoids developing from the cerebellar vermis seem to be very

rare.^{1,2} In these cases, the cysts can be totally removed, reducing the risk of recurrence.

Conclusion

Amongst the epidermoid cysts of the fourth ventricle, those arising from the cerebellar vermis, constitute a

Fig. 2 – Intraoperative photograph showing an irregularly lobulated, cauliflower-like pearly tumour, an appearance characteristic of an epidermoid.

Fig. 3 – Floor of the fourth ventricle, visible clearly after complete excision of the tumour mass.

minority. However, they provide a unique opportunity of achieving a complete removal of the tumour with the possibility of avoiding a recurrence, since there is no adherence of the tumour capsule to the floor of the fourth ventricle.

Conflicts of interest

All authors have none to declare.

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