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CASE REPORT

Cavernous Hemangioma Based on Posterior Fossa Dura

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ABSTRACT

There are 2 types of intracranial cavernous hemangioma, namely cerebral cavernous malformation and dural cavernous hemangioma. Most dural cavernous hemangiomas are located in the middle cranial fossa. We experienced a rare case of cavernous hemangioma located on the posterior fossa dura, which mimicked meningioma.

Key words: Cavernous hemangioma; Posterior fossa; Dura

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INTRODUCTION

There are 2 types of intracranial cavernous hemangioma, namely cerebral cavernous malformation and dural cavernous hemangioma. Most dural cavernous hemangiomas are located in the middle cranial fossa. We experienced a rare case of cavernous hemangioma located on the posterior fossa dura, which mimicked meningioma.

CASE REPORT

A 56-year-old man was referred to our department after a brain tumor was incidentally found by MRI. He reported that he occasionally suffered mild headaches. A neurological examination showed no abnormalities. MRI revealed a solid enhanced tumor in the left posterior fossa attached to the dura (Figure1). Although cerebral angiography showed no clear tumor staining, the patient was preoperatively diagnosed with meningioma. The tumor was resected. The tumor was reddish in color and bled easily. The tumor which was attached to the lateral sinus was carefully dissected. The tumor was totally removed and the attachment was coagulated. Pathologically, the tumor consisted of spindle cells (Figure 2). An immunostaining was negative for bcl2, EMA, S100, CD34, and CD99, thus he was diagnosed with cavernous hemangioma. The post-surgical course was uneventful. No recurrence has been observed thus far.

DISCUSSION

Reports of dural cavernous hemangiomas outside the middle cranial fossa are rare. Lewis summarized 18 cases of dural cavernous angiomas outside the middle cranial fossa, including 2 cases that they encountered in 1994^[1]. Among these 18 cases, 6 cases were located at the tentorium and only 1 case was located in the posterior fossa. Our search of the literature revealed 3 additional cases of dural cavernous hemangioma in the posterior fossa that were not included in Lewis's summary^[2-4]. Two cases of cavernous hemangioma attached to the cerebellar falx were reported in 2009 and 2010^[5,6]. Thus, a total 6 cases of cavernous hemangioma originating from the posterior fossa dura have been reported to date. The radiological and surgical findings of dural cavernous hemangioma mimic those of meningioma.



Figure 1 MR images before surgery (T1, T2, FLAIR, Gd-T1, DWI, T2*).



Figure 2 Pathological findings of surgical specimen (Hematoxylin-Eosin staining).

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