Primary intraosseous meningioma classification

Lang et al. [1] classified primary intraosseous meningioma into 3 types in order to prevent any confusion: purely extra-calvarial (type I), purely calvarial (type II), and calvarial with extracalvarial extension (type III).

Intraosseous lipomatous meningioma [2]

Osteolytic intraosseous meningiomas are the rarest and very few cases have been reported. Given that many of these may develop signs of malignancy, early histological confirmation is important in order to ensure appropriate treatment.

Type III intraosseous meningioma

Type III intraosseous meningioma is a very rare type of meningioma with extracranial extension.

Su et al., reported a case of type IIIC intraosseous meningioma with invasion of the superior sagittal sinus and skull periosteum. A 67-year-old woman was admitted due to a mass on the left frontoparietal region for 4 years. Magnetic resonance imaging showed a skull tumor with invasion of the superior sagittal sinus. After partial resection of the tumor, pathological and immunohistochemistry revealed that the epithelial meningioma derived from skull involved the skull periosteum. There was no enlargement of residual parasagittal tumor after 1 year of follow-up. The intraosseous meningioma in the present case was a rare benign tumor with good prognosis after surgery [3].

A 78-year-old female with a slowly growing hard mass in the left parietal bone was admitted. Neurological findings were normal. Plain skull radiograph showed a 6 x 6 cm hyperostotic lesion in the left parietal bone. Bone window CT scan showed thickening and hyperostosis in the same area. MRI using Gd-DTPA showed heterogeneous enhancement of the intraosseous mass, and homogenous enhancement of the dura matter. And angiogram showed a tumor stain fed by the bilateral superficial temporal artery and the It-occipital artery. The tumor and the underlying dura mater were totally removed. Preoperative diagnosis was an osteogenic tumor, but histological examination revealed a transitional meningioma. We discussed the development and the classification of an ectopic meningioma and the mechanism of hyperostosis. We should be aware of the existence of intraosseous menigiomas mimicking osteogenic tumors [4].

References

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