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A RARE CASE OF ENPLAQUE MENINGIOMA

Neurosurgery

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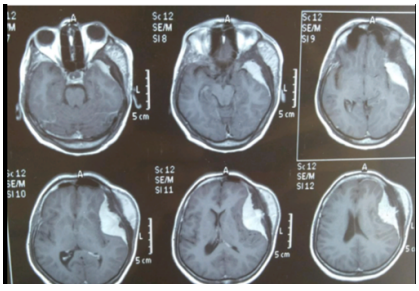
ABSTRACT

Enplaque meningiomas are a variety of rare brain tumor as compared to routine CNS meningiomas. They have a tendency to involve skull bone and subcutaneous tissue resulting in skull bone destruction. Post operatively these tumors will require proper skull bone reconstruction to prevent recurrence and coverage of bony defect.

KEYWORDS

INTRODUCTION

Meningiomas are frequently encountered tumors and constitute about 20-25% of CNS neoplasms. They arise from the arachnoid cells lining the brain and spinal cord. They may be found intracranially and extra cranially. These are mostly benign and sporadic in nature and some are familial. They are more common in women. We found a rare case of left sided fronto-temporal enplaque meningioma in a middle aged lady invading the skull bone and subcutaneous tissue.



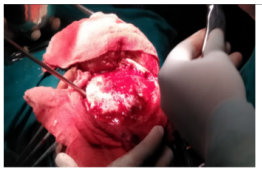
pre operative MRI scan

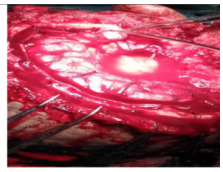
CASE REPORT

A 45 year lady came to us with swelling over the left side of the head which was gradually increasing in size to the present size of around 7cm. It was associated with headache since last 7 years. Her neurological examination was essentially normal.

On local examination the swelling was hard in consistency with size of approximately 7cm* 5cm over the left frontal region of the skull. On palpation it was immobile and fixed to underlying bone and overlying skin with normal skin covering it . Her MRI was suggestive of a 7x5x5 cm homogenous dural based lesion in left fronto-temporal region which was isointense on T1 weighted images and hyperintense on T2 weighted images. It was extra axial and enhanced on contrast administration with having typical "**dural tail sign"** . Lesion was also invading the skull bone and subcutaneous tissue. After proper pre operative workup and necessary investigation surgery was planned. **Left sided fronto temporal craniectomy was done after proper nibbling of the involved bone. Tumor was completely excised along with the adherent dura. G-patch duroplasty was done followed by titanium mesh cranioplasty as a reconstruction method to cover the bony defect**. Postoperatively the patient was clinically stable.

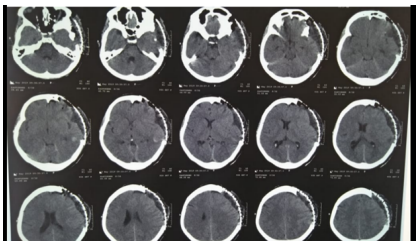
Her histopathology report came out to be transitional meningioma of both tumor and skull bone .



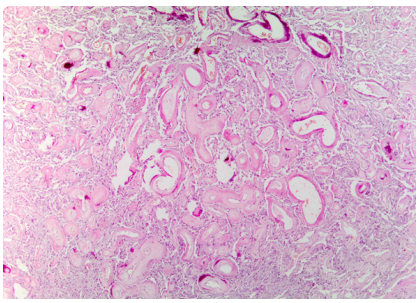


DISCUSSION

Enplaque meningioma is a rare tumor and different from other CNS tumors that they have a tendency to involve the surrounding skull bone and subcutaneous tissue. Preoperatively the bony reconstruction should be properly planned and should be discussed properly with the patient and their relatives. These tumors have symptoms usually due to erosion of the surrounding bone & subcutaneous tissue and compression of brain parenchyma. Around 5-10 % of meningiomas are malignant and are more likely to cause direct invasion. In all forms of bony invasion, reconstruction of bony defect should be planned pre operatively. In our case we had used a titanium mesh for reconstruction



post operative ct scan



CONCLUSION

Most of the meningiomas are of benign variety but around 5 % are malignant in nature. Enplaque meningiomas are different from regular meningiomas that they involve the skull bone and subcutaneous tissue and hence they require proper pre-operative planning of tumor excision and bony reconstruction.

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