



ORIGINAL RESEARCH PAPER

Histopathology

CALVARIAL HEMANGIOMA – CASE REPORT

KEY WORDS: Hemangioma, Calvarium

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ABSTRACT

Calvarial hemangioma are uncommon benign tumors. They can be mistaken for osteoma, liths, metastases and meningiomas. Histopathology remains the definitive method of diagnosis

INTRODUCTION

Calvarial haemangiomas are benign, vascular tumours of the skull. They form 2% of osseous calvarial lesions and 0.2% of all bone neoplasms. Commonly involve parietal and frontal bones. Although mostly asymptomatic, they can present cosmetic issues, and mass effect. On radiology they can be sessile or erode the skull. They show sunburst appearance, lytic expansile or sclerotic mass. En bloc resection followed by cranioplasty is the treatment of choice.

Case Study

A 42-year-old female presented with increasing headache and vomiting since two months. Computed tomography (CT) imaging showed isodense lesion 3.2 x 3 x 2.6 cm in left parietal skull.

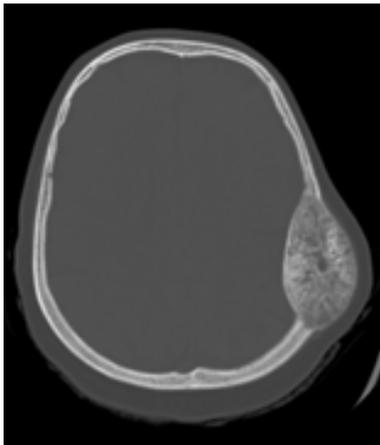


Figure 1: CT Shows Expansile Lesion with Lytic Areas in Calvarium

Intraoperatively a firm, brownish mass seen within the tables of calvarium. Piecemeal excision of the lesion was done followed by cranioplasty. The specimen was subjected to decalcification.

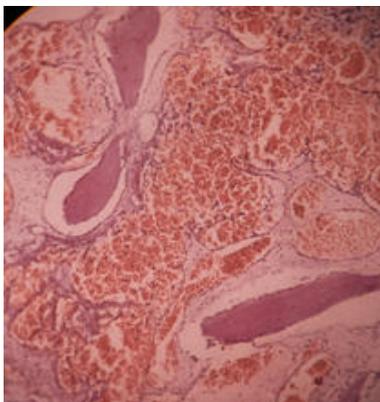


Figure 2: Histopathology Shows Bony Trabeculae

Widened by Multiple Back-to-back Cavernous Sinusoids Filled With Blood.

Elastic van Gieson stains did not show any elastic laminae or muscular walls, thus suggesting cavernous hemangioma. The mass was limited to the skull bone without any cerebral involvement. There was no recurrence on follow-up of the patient.

DISCUSSION

Calvarial hemangiomas may be solitary or multiple. They are postulated to follow cranial trauma. Clinical features include headache, scalp swelling, diplopia and seizures. Radioimaging can present as lytic lesion, sclerotic lesion or bosselated sessile mass. Radiological mimics include metastases, eosinophilic granulomas, fibrous dysplasia, osteoma, intraosseous meningiomas, aneurysmal bone cysts and dermoid cysts.

Histological variants include cavernous, capillary, arteriovenous, and venous. Cavernous hemangiomas most frequently occur in the skull whereas capillary hemangiomas predominate in the vertebral column.

Treatment modalities include curettage, wide local excision and cranioplasty. Embolisation may reduce blood loss during surgery.

CONCLUSIONS

Calvarial hemangiomas are uncommon. Radiology can suggest a differential, but histopathology is definitive. Excision is curative.

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