

Hemangioma of maxillary sinus- A rare case report**Karthikeyan Ramasamy¹, Sivaraman Ganesan², Sunil Kumar Saxena³, Arun Alexander⁴,
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ABSTRACT

Hemangioma are benign lesion of vascular origin. Hemangioma in general are common in head and neck region. But hemangioma in the maxillary sinus is relatively rare. Hemangioma of the maxillary sinus should always be considered as a differential diagnosis for lesion in the maxillary sinus. This case is reported because of its rarity of presentation.

We present a case of a 60 year old female with a cavernous hemangioma of the maxillary sinus, with symptoms of recurrent epistaxis and facial asymmetry. The lesion was successfully excised by combined endoscopic and canine fossa antrostomy and the patient has been free of symptoms since past 4 months. Review of relevant literature has been discussed subsequently.

Key words: Cavernous hemangioma ; Maxillary sinus; Endoscopic excision

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INTRODUCTION

Hemangioma are benign lesion of vascular origin. Hemangioma in general are common in head and neck region . But hemangioma in the maxillary sinus is relatively rare. Only 5 out of the 85 cases described by Fu and Perzin had vascular lesion of maxillary sinus. Hemangioma of the maxillary sinus should always be considered as a differential diagnosis for lesion in the maxillary sinus. This case is reported because of its rarity of presentation.

CASE REPORT

A 60year old female with history of recurrent epistaxis for past 8 years on/off , history of nasal obstruction for past 8 year insidious in onset , progressive in nature. There was no history of pain , trauma to nose , previous surgery, associated bleeding disorder , any other comorbidities

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On examination of the face obvious facial asymmetry on the right side of face with obliteration of the right nasolabial groove, right orbital rim palpable with effacement of the right labiobuccal sulcus and fullness in the right side soft palate, palatal movements normal. Initial hemoglobin of the patient was 3g/dl so 5 unit of packed cell was transfused before taking the case for surgery. Due the prolonged history of the swelling we started investigating the patient with diagnostic nasal endoscopy and contrast enhanced computerized tomography. Diagnostic nasal endoscopy showed a swelling pushing the lateral wall of nose medial on the right side no obvious mass was wished. Contrast enhanced computerized tomography showed a vascular tumour occupying the right side maxillary sinus with erosion and remodeling the anterior wall of maxilla. Preoperative Embolisation was done with gelfoam. Patient was taken up for surgery under general anaesthesia. Combined Endoscopic medial maxillectomy and canine fossa antrostomy done mass was excised in toto (Figure 1,2,3 and4). Postoperative period was uneventful. Biopsy of the lesion came as cavernous hemangioma(Figure 5 and 6). Due to rarity of cavernous hemangioma presentation in paranasal sinus this case report is written.

Figure 1: Swelling pushing the lateral wall of nasal cavity medially



Figure 3: Caldwell-Luc Procedure



Figure 2: Intraoperative picture showing the mass arising from the maxillary sinus

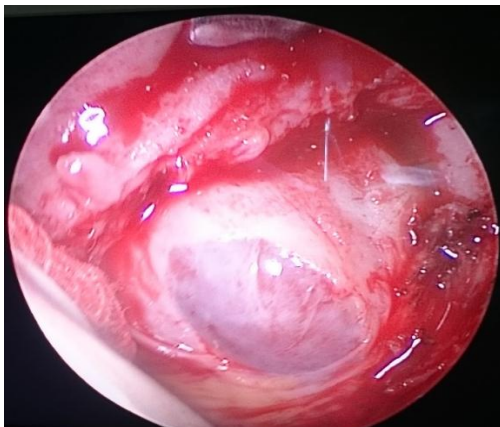


Figure 4: Postoperative Mass appearance



Figure 5: Histopathological staining with hematoxylin and eosin showing cavernous hemangioma with hyalinization

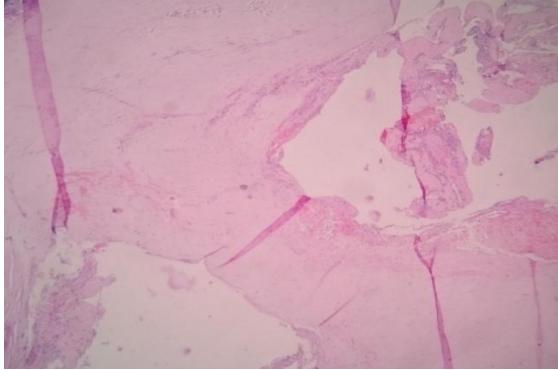
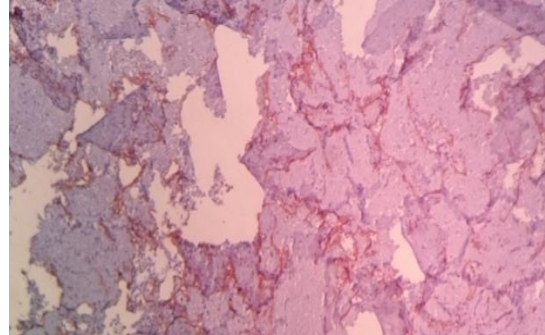


Figure 6: Immuno histo-chemistry staining with CD 31 and CD 34 showing highlighted endothelium of blood vessels



DISCUSSION

Hemangiomas of the paranasal sinus is one of the rare lesion of the paranasal nasal sinus. Hemangiomas can be of capillary or cavernous types, classification depends on the pattern of blood vessels seen under microscopy.(1–5). Capillary hemangioma are commoner, they are composed of capillary-sized blood vessels which are lined by flattened epithelium. Cavernous hemangiomas are relatively rare, they have large cavernous space lined by endothelium.

Symptoms are nasal obstruction, nasal discharge, severe epistaxis, very rarely mass appear at the time of presentation. Cavernous hemangioma of the maxillary sinus are very rare but they should always be considered as a differential diagnosis in cases presenting with epistaxis(2–8).

The radiological appearance of hemangiomas of paranasal sinus had been reported previously. Contrast enhanced computerized tomography features of maxillary sinus hemangioma most commonly will be a highly vascularized, soft-tissue mass with variable enhancement, though there can be areas of non-enhancement due to necrosis and hemorrhage within the mass. Hemangiomas often cause adjacent bony remodeling or expansion or erosion. Cavernous hemangioma can present with intralésional calcification (phospholite)(2,9). In our case, contrast enhanced computerized tomography showed a heterogeneous soft tissue density, with variable enhancement, which bone remodeling in the form of expansion of the maxillary sinus wall, with intralésional calcification all these findings were comparable with the previous findings.

Organized hematoma (OH) is most important differential diagnosis for hemangioma of Paranasal Sinuses both clinically and radiologically(4,6–9). Hemangioma and sinonasal organized hematoma are of same pathology, the fact that the vascular lumen may be larger when compared to the organized hematoma. Other differential diagnoses are mucocele, fungus ball, inflammatory polyp, cholesterol granuloma, inverted papilloma, and carcinoma. Other lesions can be differentiated by the expansile nature of other lesions and lack of contrast enhancement.

Diagnosis will most likely be made during postoperative excision biopsy. Treatment is surgical resection of the lesion. Preoperative transarterial embolization can decrease the tumor size and reduce the risk of hemorrhage during surgery(10).

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Now the stand of treatment is endoscopic resection of lesion with microdebrider. Previously depending on the extent of the lesion lateral rhinotomy, Caldwell luc operation were attempted(4,5,7-9). In our case as the lesion was extensive preoperative embolization with gelfoam was done . Combined approach with both endoscopic and canine fossa antrostomy was done and tumour was excised in toto.

CONCLUSION

Cavernous hemangioma of the maxillary sinus in an elderly female is a rare occurrence. It commonly presents with recurrent epistaxis. So this rare entity should be taken into account while considering differential diagnosis for a mass lesion inside the maxillary sinus with a prolonged history of facial asymmetry and recurrent epistaxis.

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