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INFLAMMATORY NASAL POLYP (ANTROCHOANAL POLYP) ASSOCIATED WITH CAVERNOUS HEMANGIOMA

ABSTRACT

Sinonasal cavernous hemangioma, a very rare entity, though congenital appears in third to fourth decade of life and presents with unilateral nasal obstruction and recurrent epistaxis. Bleeding nasal lesion despite typical clinical and histological presentation of antrochoanal /inflammatory nasal polyp, coexisting cavernous hemangioma should be considered when the presenting symptom is epistaxis. Appropriate surgical modality based on the expertise and anticipation to completely remove the mass should be planned. Caldwell Luc surgery is appropriate to remove such lesion when endoscopic surgery cannot proceed due to bleeding.

Keywords: Caldwell Luc surgery, cavernous hemangioma, inflammatory nasal polyp.

INTRODUCTION

Sinonasal hemangiomas are relatively uncommon. Cavernous hemangioma is a very rare entity and arises from lateral nasal wall or medial wall of maxillary sinus.[1] Though congenital, it appears in third to fourth decade of life and presents with unilateral nasal obstruction and recurrent epistaxis. We present a case of inflammatory nasal polyp/antrochoanal (AC) polyp with coexisting cavernous hemangioma.

CASE PRESENTATION

Thirty-one-year-old male presented to different hospital with recurrent nasal bleeding, right side more than left, for 3 months with increasing in severity. Each episode of blood loss was about 30-40 ml which stopped on its own. On examination, there was a pale polypoidal smooth surfaced glistening mass arising from right middle meatus. It was insensitive to touch and did not bleed. It also did not shrink on application of oxymetazoline. There was fullness in the soft palate. The provisional diagnosis was allergic fungal rhinosinusitis (AFRS). CT scan of nose and PNS showed non homogenous opacity in right maxillary sinus, nasopharynx, nasal cavity with widened osteomeatal complex (OMC) (Fig 1). Endoscopic biopsy was done planned and piece of nasal mass was sent for histopathological examination (HPE). After biopsy there was profuse bleeding from choanal part and posterior part of inferior turbinate.

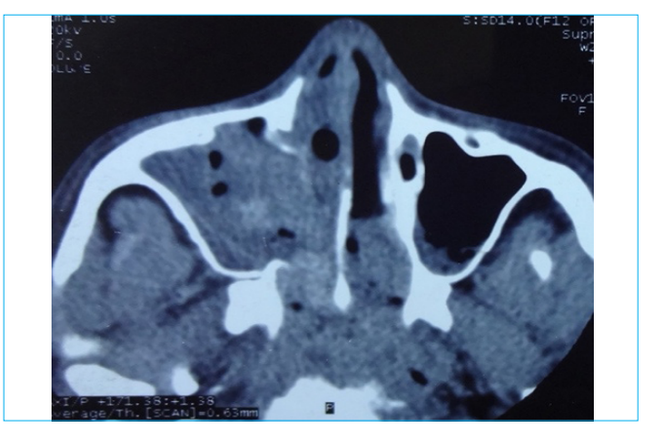

Fig 1: CT scan of nose and PNS finding

So further procedure was abandoned and bilateral nasal packing was performed. Contrast enhanced MRI was done few days later which showed heterogeneously enhancing altered signal intensity lesion in right maxillary sinus obliterating and expanding OMC with lesion extending to nasal cavity and nasopharynx (Fig 2). HPE report showed AC polyp with papillary endothelial projection.

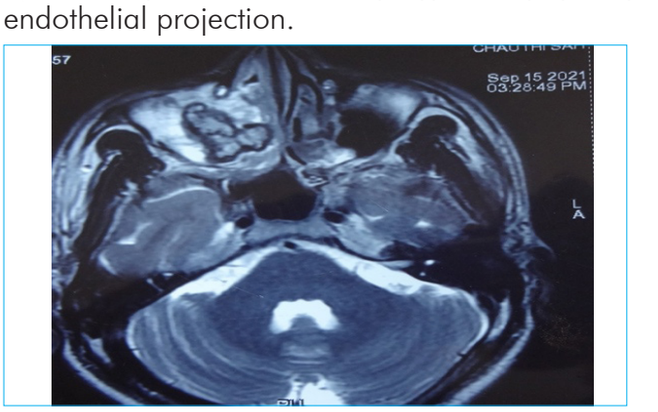

Fig 2: MRI of nose and PNS

Caldwell Luc surgery was planned and performed. Bleeding made it difficult to visualize the lesion. The lesion was removed completely. It was noted that packing for sometimes stopped the bleeding. After completion of surgery, antral packing was done which was removed after 3 days. The HPE showed features of chronic rhinosinusitis (CRS) with inflammatory polyp and a fragment of tissue having cavernous hemangioma. No fungal elements were seen on PAS staining (Fig 3). After a 3 month of follow up patient was doing well with no obvious new complains and follow up scan showed no obvious recurrence (Fig 4)

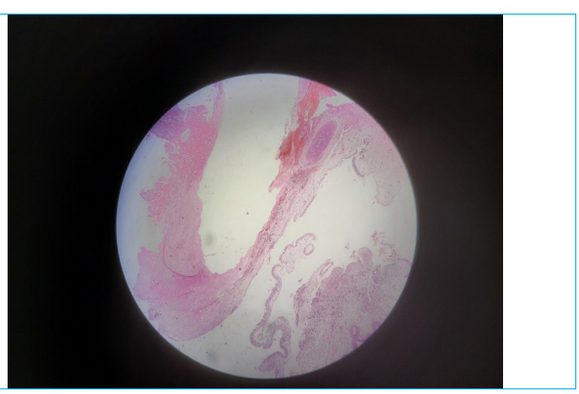

Fig 3: Final HPE of nasal mass

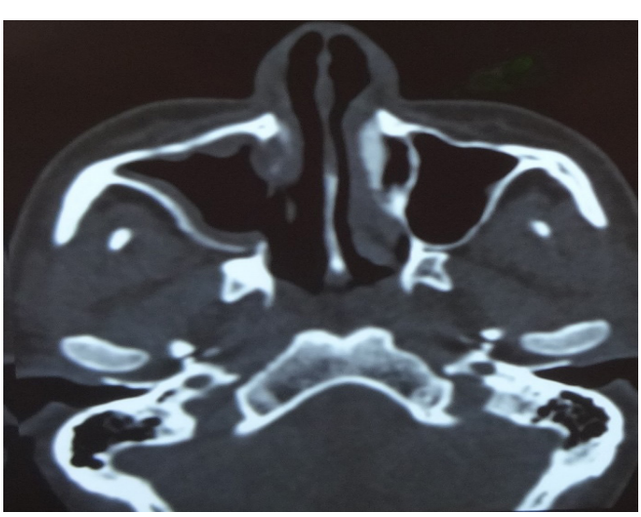

Fig 4: Post operative CT nose PNS

DISCUSSION

The most common polyps found in the nose and PNS are associated with CRS. It is mainly descriptive and not specific for any particular entity. However, presence of eosinophilic mucin means AFRS.[2] AC polyps are one of common type of polyp.[3] Sometimes hemangiomas may mimic a vascularized nasal polyp.[4]

Haemangiomas are predominantly capillary and are found attached to the nasal septum and cavernous haemangiomas, on the other hand, are found on the lateral wall of the nasal cavity.[5] The latter are rare and usually do not present until adulthood. Their incidence peaks in the fourth decade of life with symptoms of epistaxis or hemoptysis and an enlarging lesion in the nose.[6] Histologically, they are composed of multiple, large, cystic, thin-walled, and blood-filled spaces lined by endothelial cells, and separated by scant connective tissue stroma.[6,7]

Cavernous hemangiomas though very rare, should be added to the differential diagnosis of nasal cavity masses with presenting symptoms of epistaxis and nasal obstruction to avoid misdiagnosis of a malignant tumor, angiofibroma or other benign vascular mass.[1] Sometimes they produce nasal bone destruction creating clinical and radiological difficulties to differentiate them from more common lesions.[1,8]. Despite typical clinical examination findings and histological confirmation of AC polyp, cavernous hemangioma should be one of the differential diagnoses of bleeding nasal lesion when the clinical presentation is epistaxis.

Since the blood vessels can grow in the cartilage or bone tissue, the mass along with mucosa and part of mucoperichondrium to which this is attached should be removed to prevent recurrence.[9] Caldwell Luc surgery is appropriate in such cases where lesion with the attached mucosa can be removed completely under direct vision. It is all the more important in low volume FESS center to perform Caldwell Luc surgery as it completely removes the lesion than abandoning the treatment due to per operative bleeding. and also can be performed even at remote facilities with limited ENT setup.

CONCLUSION

In nasal lesion typical of AC polyp but with the presenting symptom of epistaxis, association with cavernous hemangioma should be considered and manage accordingly.

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