



## A CASE REPORT: HAEMANGIOMA OF NASAL CAVITY

## ENT

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## ABSTRACT

Hemangioma of nose is a benign rapidly growing lesion of the mucous membranes. It rarely presents as a mass that fills up the entire nasal cavity. It is although more common in females in the third decade of life. The capillary haemangioma usually involves the lips, tongue, gingiva and the buccal mucosa but nasal cavity is rare location for its occurrence. We have come across with a rare case of Haemangioma of Nasal Cavity in a 20-year-old male involving right ethmoid sinuses, osteomeatal complex extending into right frontal sinus and inferomedial aspect of right orbit displacing the eye globe. Right medial maxillectomy by Denker's approach with right frontal sinus trephination was done successfully.

## KEYWORDS

Haemangioma, Nasal Cavity, Osteomeatal complex, Denker's Approach

## INTRODUCTION

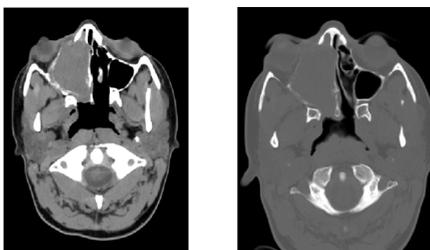
Haemangioma of nasal cavity also known as Lobular Capillary Haemangioma (LCH) is a benign lesion of unknown etiology. Hemangiomas account for about 20% of all benign neoplasms of the nasal cavity. Hemangioma of the nasal cavity occurs most commonly on the septum (65%), lateral wall (18%), and vestibule (16%)<sup>1</sup>. Nasal cavity is a rare location for Haemangioma to occur. Nasal hemangiomas mostly arise from the soft tissues of the nasal cavity. Haemangiomas are predominantly capillary and are found attached to the nasal septum. Cavernous Haemangiomas, on the other hand, are more likely to be found on the lateral wall of the nasal cavity. Epistaxis, nasal obstruction, and headache are the common symptoms with which the patients present.

## CASE REPORT

A 20 year old male came to the outpatient department with complaint of right sided swelling over medial canthus of eye and watering from right eye since 6 months. CT scan of orbit revealed expansile lesion with soft tissue and calcific components in right ethmoid sinuses, osteomeatal complex extending into right frontal sinus and inferomedial aspect of right orbit displacing the eye globe. Right medial maxillectomy by Denker's approach with right frontal sinus trephination was done successfully. Excised specimen was sent for Histopathological Examination and was reported as lobular capillary haemangioma of nasal cavity. Patient is on regular follow up with no complications.



(a) CT images of the subject



(b) CT images of the subject

## Discussion

Lobular Capillary Haemangioma are benign polypoid<sup>2</sup> forms of capillary haemangioma primarily occurring on skin and mucous membranes. It occurs in all ages, but more often in the 3<sup>rd</sup> decade. The gingiva, lips, tongue and buccal mucosa are the most common sites but nasal cavity is a rare site. Mucosal LCH<sup>3</sup> is found most often arising from the anterior nasal septum (the Little's area or Kiesselbach's plexus), followed by the turbinates. Other sites include the maxillary sinus, ethmoid sinus and the roof of the nasal cavity. The precise mechanism for the development of LCH is unknown. Traumas, hormonal influences, viral oncogenes, microscopic arteriovenous malformations, the production of angiogenic growth factors and cytogenetic abnormalities have been postulated to play a role. Lobular Capillary Haemangioma cases secondary to postoperative use of nasal packs have been reported. It can be pedunculated or wide based. Its size ranges from several millimeters to centimeters. The old term "Pyogenic Granuloma" is a misnomer because clear histologic and microscopic features indicating an infectious origin are lacking. In addition, the term "granuloma" would allude to the presence of granulation tissue in the lesion which is not typical of a lobular capillary haemangioma. Histologically it is characterized by submucosal<sup>4</sup> vascular proliferation arranged in lobules or clusters composed of central capillaries and small ramifying tributaries. There is no intercommunication of vascular spaces or cytological atypia. The differential diagnosis include cavernous haemangioma which occurs less frequently in the nasal cavity, rhinosporidiosis<sup>5</sup> which may present as a friable polypoid vascular mass<sup>6</sup> with the surface studded with tiny white dots from spores beneath the epithelium giving it a characteristic "strawberry-like" appearance and juvenile nasopharyngeal angiofibroma in adolescent males. In our case the haemangioma also involved the optic nerve in the orbit. The use of nasal endoscopes for both diagnosis as well as surgery is the preferred method of treatment.

Endoscopic Denker procedure, a novel technique that involves creation of an endonasal anterior maxillectomy without the need for a separate sub labial incision. With this approach, complete exposure of the anterior maxilla is attained as well as the entire lateral and posterior walls of the maxillary sinus, enabling access to both the pterygopalatine and infratemporal fossae.

In this case Right medial maxillectomy by Denker's approach with right frontal sinus trephination was done.

## Conclusion

LCH is relatively a rare lesion of unknown etiology particularly when it occurs in nasal cavity. It should always be considered in the differential diagnosis of the vascular lesions in the nasal cavity. Endoscopy guided total excision is the treatment of choice even for enormously large lesions with no requirement of the preoperative

embolization or perioperative blood transfusion.

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