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CAPILLARY NASAL HEMANGIOMA BLOCKING CHOANA EXCISED ENDOSCOPICALLY USING FOLEYS CATHETER UNDER LOCAL ANAESTHESIA: A CASE REPORT

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ABSTRACT **Introduction:** Hemangiomas, are benign head and neck tumor which constitute less than 20% of all benign nasal cavity tumors. Certain authors consider hemangiomas similar to hamartomas or congenital vascular anomalies.Sinonasal hemangiomas are rare and account for only about 10% of all hemangiomas of the head and neck regions. **Case Report:** A 45 years old female presented with complaints of recurrent nasal bleed from right nostril off for past 1year. CT scan of nose and paranasal sinuses with contrast showed lobulated enhancing mass in the posterior choana on right side which had its epicenter in the right inferior turbinate causing partial erosion of the bony part of right inferior turbinate. Histopathology was consistent with capillary hemangioma. **Conclusion:** The nasal cavity is believed to be rare site of origin for hemangiomas. This case described shows the rare site of origin of nasal capillary hemangioma and delicate planning in its treatment and its execution under local anaesthesia not only because of the nasal disease but also the patient's general condition.

KEYWORDS : nasal hemangioma, inferior turbinate origin, capillary type, local anaesthesia

INTRODUTION

Abnormal vascular development give rise to congenital vascular anomalies. There are two major groups of vascular abnormalities, including vascular malformation, which is a local defect in vascular morphogenesis, and vascular tumor (hemangioma), which is cellular hyperplasia.[1] Hemangiomas being the benign head and neck tumor comprises less than 20% of all benign nasal cavity tumors.[2] Some authors consider hemangiomas as hamartomas or congenital vascular anomalies.[3] Poncet and Dor in 1897 described them initially as human botryomycosis.[4,5] Trauma and hormone related factors forms the main etiologies. The most frequent location of hemangioma include the gingiv, oral mucosa, tongue anad lips.[6] The size and shape of these lesions vary measuring from a few millimeters to several centimeters and may be pedunculated or broad based.[5] Sinonasal hemangiomas are rare and account for only about 10% of all hemangiomas of the head and neck regions.[3] Anterior portion of the nasal septum is the usual site of origin, the exact location being locus Valsalvae or area of little and in the nasal vestibule.[3,5] In 1950, Ash and Old first studies Inflammatory hemangioma of the nasal septum and named it "bleeding polyp". Other sites include lateral wall of nose, inferior turbinate, the floor of the nasal cavity and the roof of the vestibule.[2,7] . Gender distribution for hemagioma occurring in fifth decade is equal for both sexes, whereas in childhood and adolescence there is male predominance. In the reproductive age group , hemangiomas are more frequently found in women. [8]This led to the fact that hormonal changes during pregnancy may facilitate their development. This association of hemangioma with reproductive age group was defined by Nair et al as a pregnancy tumor. [9] Sino-nasal hemangiomas occur primarily with unilateral nasal obstruction, recurrent epistaxis, mucopurulent rhinorrhea, epiphora, facial pain and headache or hyposmia. [8] Less frequently reported symptoms include with progressive painless swelling and nasal deformity. [10] The risk of bleeding and anemia is one of the main problems associated with these diseases. [10] We report the clinical case of a patient with nasal Hemangioma, with rare site of origin presenting with recurrent epistaxis and anemia and subjected to surgical removal of the tumor under local anaesthesia.

Case Report

A 45 years old female presented with complaints of recurrent epistaxis from right nostrils for past 1 year. She had associated complain of right nasal obstruction. There was no other nasal symptom. There was no history of trauma in the affected nostril, previous surgery, headache, facial pain, recurrent URTI. Her haemoglobin was 4gm/dl and after 2units of blood transfusion it reached 6gm/dl. Patient was subjected to detailed clinical evaluation including anterior rhinoscopy and diagnostic nasal endoscopy. On anterior rhinoscopy, b/l nasal cavity appeared to be normal. On endoscopic examination, Examination revealed a irregular purple colour polypoid mass in the right nasal cavity posteriorly between nasal septum and inferior turbinate. The mass was bleeding on touch. The left nasal cavity showed normal septum , turbinates and nasal mucosa and the mass was partially blocking the left choane. After a proper written informed consent from the patient, she was subjected to CT scan of nose and paranasal sinuses with contrast. Imaging showed lobulated enhancing mass measuring 2.4*2.1*2 cm in the posterior choana on right side which had its epicenter in the right inferior turbinate causing partial erosion of the bony part of right inferior turbinate ? neoplastic etiology. Post imaging patient was planned for endoscopic resection under local anaesthesia as GA fitness could not be availed due to low hemoglobin of 6 gm/dl. A 16 Fr Foleys catheter was used and inserted in opposite nostril (left) and bulb was inflated with air at the choana to prevent accidental aspiration of the mass and blood and reduce vascularity by providing compression in the nasopharynx. After visualizing posteriorly its origin from inferior turbinate, its base was cauterized and using a roller gauge soaked in lignocaine and adrenaline mixture mass was pushed towards the choana and was delivered orally. The specimen was sent for histopathology, which showed benign respiratory lined epithelial tissue with ulceration, subepithelial fibrocollagenous tissue revealing aggregates of variable sized proliferation of thin walled blood vessel lined by flattened epithelium, which was consistent with capillary hemangioma. The patient's recovery was uneventful. One month after surgery, nasal cavity was healthy with no crusting. After 6 months follow up, there was no recurrence of the lesion seen and finally the patient discharged from OPD. We report this case for being rare as capillary hemangioma has site of origin from the anterior nasal septum which was not in our case.

DISCUSSION

Hemangiomas or bleeding polyp of the sino-nasal region are benign vascular tumors.[7] Their exact etiology is not well known. Hemangiomas are classified into 3 subtypes: 1. capillary (which has its origin mostly from little's are in septum) 2. Cavernous (usually arising from nasal side wall) and 3. mixed form by Mulliken and Glowacki in 1982.[7]

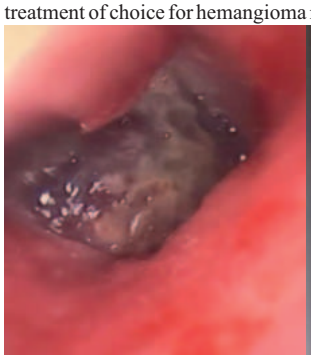
Poncet and Dor first described the nasal hemangiomas as human botryomycosis. Approximately 50 percentage of hemangiomas affects the head and neck region nasopharynx being the rarest site.Therefore it is safe to presume that hemangioma in the nasal region is a rare disease.[11]Capillary hemangioma which is the commonest type is seen mostly originating from anterior septal cartilage. Capillary hemangioma is seen mostly in the first years of life and may show spontaneous regression [12, 14]. Macroscopically hemangiomas have smooth, lobulated, polypoidal appearance, while microscopically it has capillaries covered with flat epithelium. These features make them

difficult to be differentiated from other pseudotumor. [13, 14] Hemangiomas of cavernous type are not common in nose and PNS and thought to have origin from inferior turbinate, vomer, lamina and maxillary sinus another entity named nasal mucosal hemangiomas need to be distinguished from hemangiomas as they arise from the maxilla or nasal bones which are primary osseous lesions, of which the symptoms and surgical approach are entirely different.[15-20]

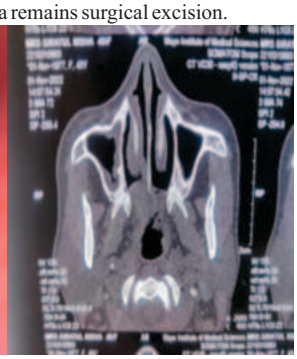
As described by previous literature, nasal hemangioma commonly arise from the anterioir septum but certain studies reported hemangomas in other nasal sites like inferior and middle turbinate, posterior part of septum and vestibule.[21]

Amongst the other causes of hemangioma as stated by a review of the literature include repeated trauma associated with prolonged nasal packing and nasal intubataion.[22] Another series of hemangiomas of the nasal cavity by Puxeddu et al described other possible etiological factors: pregnancy and hormonal influence.[23,24]

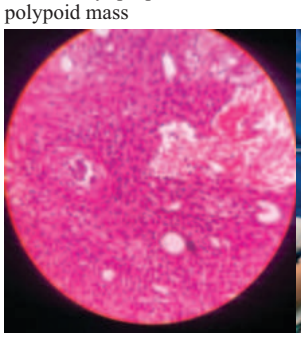
Nasala cavity hemangiomas exhibit common symptom of epistaxis nd rare symptoms like obstruction, rhinorrhea and watery eyes.[25] Nasal bleeding and nasal obstruction remains the primary complaints followed by other symptoms like nasal discharge and extra nasal symptoms, such as facial pain and headache, are rarely encountered. [26] We consider an adequate radiological evaluation as essential in the evaluation of a suspected lesion of vascular nature before proceeding for surgical excision. In our case we did contrast Ct scan of nose and paranasal sinuses which showed vascular mass originating from inferior turbinate with mild erosion of bony part of inferior turbinate.
The differential diagnoses of intranasal hemangioma include nasal polyp, antrochoanal polyp, meningocele, meningoencephalocele, sarcoidosis, Wegener's granulomatosis, simple granulation tissue, papilloma, Kaposi's sarcoma, hemangiosarcoma, squamous-cell carcinoma, mucosal malignant melanoma, and lymphoma.[27] The treatment of choice for hemangioma remains surgical excision.



Endoscopic view of right nasal cavity: purple polypoid mass

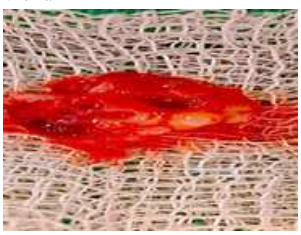


CECT PNS: showing mass arising from inferior turbinate



HPE: showing proliferated thin walled blood vessel with flattened epithelium

Intra operative technique using Foleys catheter



Specimen Sent For HPE

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