

## Nasal mucosal hemangioma: A rare but must-include D/D of nasal bleeding mass

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### ABSTRACT

Hemangiomas are benign tumors of blood vessel endothelium, capillary type being the commonest. Capillary hemangiomas arising from nasal mucosa is relatively rare but it should be included in the differential diagnosis of recurrent epistaxis or nasal bleeding mass. Careful clinical examination of nose is important to diagnose even small hemangiomas that can lead to troublesome bleeding. A case report is presented here of a 30-year-women with capillary hemangioma of left nasal cavity having recurrent epistaxis treated with minimally invasive nasal endoscopic excision of the mass.

**Key words:** Capillary hemangioma, Epistaxis, Surgical treatment

## INTRODUCTION

Hemangiomas are very common tumors composed of blood-filled vessels. Capillary hemangiomas are the most common type; these occur in the skin, subcutaneous tissues, and mucous membranes of the oral cavities and lips, as well as in the liver, spleen, and kidneys.<sup>1</sup> Hemangiomas arising from nasal mucosa is rare. The most common symptoms are nasal bleeding and obstruction. A case report of a 30-year-old woman with a capillary hemangioma of left nasal cavity mucosa was presented. The importance of considering capillary hemangioma as a differential diagnosis of nasal bleeding mass was emphasized. Trans-nasal endoscopic technique is sufficient for treating these tumors and it does not require a pre-operative embolisation.

## CASE REPORT

A 30-year-old woman presented with recurrent episodes of nasal bleeding from left side of nose since 3 months. She had a habit of nose picking occasionally. No other relevant history was presented. Clinical examination with head light and thudicum speculum revealed a tiny growth (1 × 0.5 cm approximately) arising from left inferior turbinate, which was bleeding on manipulation. Rest of the examination was unremarkable. The patient's laboratory work-up was normal. She was treated surgically by endoscopic excision

of the mass under local anesthesia (with cotton pledges placed in nasal cavity soaked in 4% lignocaine after using topical nasal decongestants) as a day case and cauterization of the base with bipolar diathermy. She tolerated the procedure well. Follow-ups till 3 months she has no further nasal bleeding/recurrence of mass.

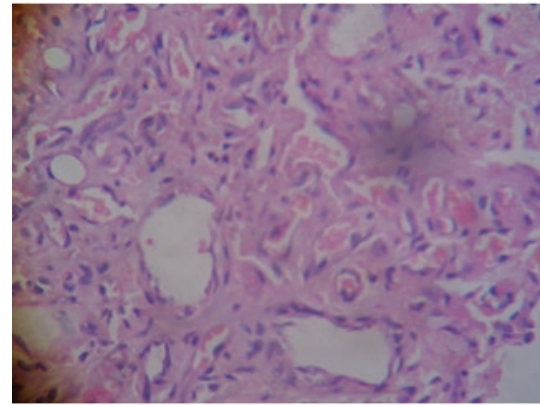
## DISCUSSION

Head and neck hemangiomas comprise about 0.5% of all head and neck neoplasm, commonly present at cutaneous sites as scalp, neck, ear, lip, and nose. These usually present as erythematous, raised, mobile masses. Depending on the dominant vessel size at microscopy, hemangiomas are divided into capillary, cavernous, and mixed types. These may produce functional or cosmetic sequele specially if located in ear, nose, or lips. Surgical excision may be accomplished keeping in mind the higher rate of recurrence of these tumors because of their more infiltrative growth pattern. Medical therapy includes steroid (for controlling the proliferative growth phase of hemangiomas) and antiangiogenic property of interferon alpha 2a (used for massive and life-threatening tumors) but are not without side effects.<sup>2,3</sup>

Capillary hemangiomas of nasal cavity, though uncommon, are reported in the literature as lobular capillary

hemangioma, commonly known as pyogenic granuloma. In 1980, Mills *et al.* termed pyogenic granuloma as lobular capillary hemangioma because of its characteristic microscopic features.<sup>4,5</sup> These lesions more commonly seen in women in third decade like in our case. The commoner sites include gingiva, buccal mucosa, lips, and tongue. In the nasal cavity, these arise from antero-inferior part of nasal septum or as in our case, from turbinate. Causes attributed are local trauma, hormonal factors including pregnancy, or contraceptive pill usage. Nasal bleeding and varying degree of nasal obstruction are reported as clinical features in most literature.<sup>5,6</sup> Differential diagnosis of such lesions are Rhinosporidiosis, Wegener's granulomatosis, Angiosarcoma, or Kaposi sarcoma.<sup>7</sup> Naked eye appearance of the tumor is that of a red or purple solitary mass. Histologically, there is a central vessel, surrounded by varying sized capillaries.<sup>6</sup> In our case, the lobular pattern was not seen, there was proliferation of thin walled vessels intermixed with inflammatory cells. Total excision of these tumors is recommended which is best done with the trans-nasal endoscopic techniques. No recommendation for pre-operative embolization is mentioned in literature.<sup>6</sup> This patient was managed by endoscopic excision of the complete mass under local anesthesia and post-operatively specimen sent for histopathology which confirmed our clinical diagnosis (Figure 1). The patient had no recurrence of symptoms after 3 months of follow-up, also clinically there was no growth seen.

This case report was presented to emphasize that, hemangiomas, though uncommon lesion in nasal cavity, should be included in the differential diagnosis of recurrent epistaxis or a bleeding mass of nasal cavity. Careful clinical/endoscopic examination is of utmost importance to diagnose even small tumors which can lead to significant bleeding and unnecessary nasal packing and other morbidities to the patient.



**Figure 1:** Histopathology of excised mass

## REFERENCES

1. Kumar V, Abbas AK and Aster JC. Robbins Basic Pathology. 9th ed. Philadelphia, PA: Saunders Elsevier, 2012. 358–359 [Chapter 9].
2. Shah JP and Kedesian PA. Neurogenic and vascular tumors of the head and neck. *Cancer Head Neck* 2001;16:288–289.
3. Batsakis JG and Rice DH. The pathology of head and neck tumors: vasoformative tumors, Part 9A. *Head Neck Surg* 1981;3:231–239.
4. Mills SE, Cooper PH and Fechner RE. Lobular capillary hemangioma: the underlying lesion of pyogenic granuloma. A study of 73 cases from the oral and nasal mucous membranes. *Am J Surg Pathol* 1980;4:470–479 [PubMed].
5. Miller FR, D'Agostino MA and Schlack K. Lobular capillary hemangioma of the nasal cavity. *Otolaryngol Head Neck Surg* 1999;120:783–784.
6. Kamath PM, Shenoy SV, Kini J and Mukundan A. Lobular capillary hemangioma of the nasal septum – a case report. *Egypt J Ear Nose Throat Allied Sci* 2014;15:255–257.
7. Bhargava A, Gupta RK, Yazdani SY and Jassal SS. *IOSR J Dent Med Sci (IOSR-JDMS)* 2015;14(3 Ver. V):57–59.

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