

## A Case of Hemangioma Arising from the Inferior Turbinate

### ABSTRACT

Nasal cavity hemangiomas are rare. In our case, a 37-year-old man presented with complaints of the right nasal cavity obstruction and epistaxis. After doing pre-operative investigation, a provisional diagnosis of benign vascular lesion in the right nasal cavity arising from the inferior turbinate was reached. The mass was surgically excised intranasally under endoscopic guidance and histopathology confirmed the diagnosis as hemangioma. The patient has been followed up and no recurrence noted.

**Key words:** Hemangioma, Inferior, Nasal, Turbinate

### INTRODUCTION

Hemangiomas are benign vascular tumors.<sup>[1,2]</sup> Skin, mucosa, bones, muscles, and glands are the common sites of origin of hemangiomas.<sup>[3]</sup> Sinonasal hemangiomas are rare and account for only about 10% of all hemangiomas of the head and neck regions.<sup>[4,5]</sup> We are reporting a case of benign vascular lesion of the right nasal cavity arising from the anterior end of the inferior turbinate which was surgically excised and on histopathological examination gave a confirmatory diagnosis of hemangioma.

### CASE DESCRIPTION

A 37-year-old man presented to ENT outpatient department with complaints of progressively increasing right-sided nasal obstruction and recurrent episodes of epistaxis since 5 months. On anterior rhinoscopy and diagnostic nasal endoscopy, a polypoidal reddish mass was seen filling the right nasal cavity, which bleeds on touch. The left nasal cavity was within normal limit. Rest of the ENT examination was within normal limit. On contrast-enhanced computed tomography nose and paranasal sinuses (PNS), a polypoidal highly vascular mass measuring about  $9.2 \times 9.7 \times 18.7$  mm arising from the medial surface of the anterior aspect of the right inferior turbinate was noted [Figure 1]. After doing preanesthetic checkup, the patient was posted in OT and under G.A the mass was excised under endoscopic guidance with cauterization of its attachment with the inferior turbinate. Postoperatively, nasal packing was done which was removed after 48 h and the patient was discharged. Histopathological examination of excised specimen [Figure 2] showed proliferation of capillary sized and few cavernous blood vessels [Figure 3] and confirmed the diagnosis as hemangioma. The patient was followed up for 12 months and no recurrence noted.

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### DISCUSSION

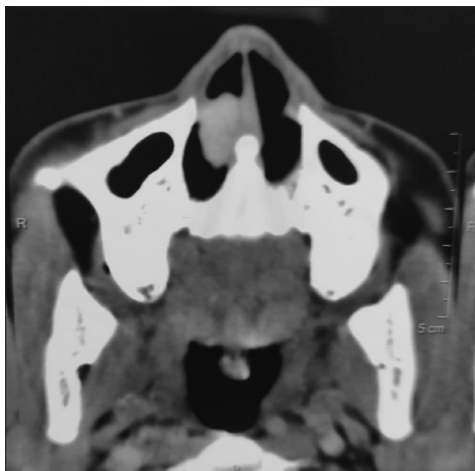
Hemangiomas are benign vascular tumors and are classified into capillary, cavernous, and mixed types based on the dominant vessel appreciated on microscopic examination.<sup>[6]</sup> The sites of hemangioma in the nose are anterior part of the nasal septum and the lateral nasal wall.<sup>[2]</sup>

The exact etiology is unknown. Trauma and hormonal factors may have a role in the etiopathogenesis of hemangioma.<sup>[7]</sup>

The most common presentation of hemangioma of nose is that of a unilateral, slowly growing hemorrhagic mass, and frequently red or purple, which is sometimes coated with necrotic tissues. The other common symptoms are recurrent epistaxis, hemoptysis, and nasal obstruction.<sup>[8,9]</sup>

The differential diagnosis of the nasal hemangiomas includes inverted papilloma, rhinosporidiosis, olfactory neuroblastoma, lymphoma, hemangiopericytoma, hemangioendothelioma, arteriovenous fistula, lymphangioma, glomangioma, melanoma, adenocarcinoma, and squamous cell carcinoma.

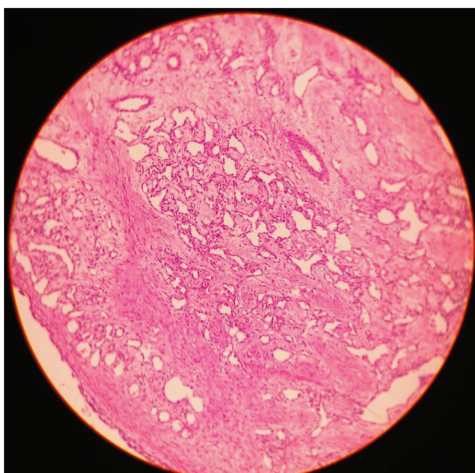
Obtaining tissue for biopsy in vascular lesions which present with nasal bleeding is difficult and may lead to catastrophe. Hence, in such situations, the surgeon tries to reach at a provisional diagnosis basing on radiological investigations and plan further management.



**Figure 1:** Contrast-enhanced computed tomography nose and paranasal sinuses – A  $9.2 \times 9.7 \times 18.7$  mm polypoidal mass in the right nasal cavity arising from the medial surface of the anterior aspect of the right inferior turbinate



**Figure 2:** Excised specimen



**Figure 3:** Histopathology picture

Various surgical and nonsurgical modalities of the treatment have been reported in the literature for the treatment of hemangiomas. Surgical resection of the tumor and ligation or cauterization to the feeding vessels is the most successful modality of the treatment.<sup>[8]</sup> The various surgical approaches for sinonasal hemangiomas are midfacial degloving, lateral rhinotomy, transpalatal, transantral approach, and the Le Fort I osteotomy procedure.<sup>[3]</sup> The transnasal endoscopic approach is the surgical approach which is considered in cases of intranasal hemangiomas of the nasal cavity and PNS.<sup>[8,10]</sup>

The other modes of the treatment are cryotherapy, corticosteroid treatment, sclerosing solutions, and resection using YAG laser.

Embolization of the hemangiomas may be done, only if appropriate angiographic facilities and expertise are available.<sup>[11]</sup>

## CONCLUSION

Hemangiomas are rare lesions which should be kept as a differential diagnosis of bleeding vascular mass of the nasal cavity and should be managed by surgical excision.

## DECLARATION

The authors declare that they have no conflicts of interest and no funding was received.

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