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## **OLGU BILDIRISI / CASE REPORT**

# Lobular capillary hemangioma of the middle turbinate

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#### Orta konka yerleşimli lobüler kapiller hemanjiyom

Lobüler kapiller hemanjiyom, vasküler, pediküllü, benign bir tümördür. Çoğunlukla cilt ve muköz membranlardan köken almaktadır. Nadiren nazal kavitede yerleşim gösterir. Literatürde, nazal kavite yerleşimli lobüler hemanjiyom ile ilgili az sayıda yayın bulunmaktadır. Kliniğimize, tekrarlayan burun kanaması ve sol burun tıkanıklığı şikayetiyle başvuran 81 yaşında erkek hasta sunulmuştur. Hastanın sol orta konkasının medial tarafında lokalize lobüle kapiller hemanjiyom tespit edilmiştir. Nazal kavitelerin ayırıcı tanısında lobüler kapiller hemajiyom akılda tutulmalıdır. Ayrıca tümörün sunulan olguda olduğu gibi atipik bir biçimde predispozan faktör olmadan, ileri yaşta, beklenmeyen lokalizasyonda ve ülsere görünümde olabileceği de unutulmamalıdır.

Anahtar Sözcükler: Lobüler kapiller hemanjiyom, nazal kavite, orta konka.

#### Abstract

Lobular capillary hemangioma is believed to be a benign, pedunculated vascular tumor that generally originates from the skin and mucous membranes. Rarely, this tumor is seen in the nasal cavity. To our knowledge, there are few reports of nasal cavity lobular capillary hemangiomas in the English literature.

We present an 81-year-old man with complaints of recurrent epistaxis and left nasal blockage. He was found to have a lobular capillary hemangioma originating from the medial aspect of the left middle turbinate. Capillary hemangioma should be considered in the differential diagnosis of nasal masses. This tumor can present atypically with no predisposing factors, in old age, in unpredicted locations, and with an ulcerative necrotic appearance such as in the following case.

**Key Words:** Lobular capillary hemangioma, nasal cavity, middle turbinate.

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## Introduction

Lobular capillary hemangioma is believed to be a benign, pedunculated vascular tumor. It generally originates from the skin and mucous membranes.<sup>1</sup> Although it can be seen in all ages, it is most often seen in the third decade of life.<sup>1</sup> Generally seen in the head and neck region, it usually originates from gingiva, lips, tongue, and buccal mucosa.<sup>1</sup> Rarely this tumor is seen in the nasal cavity. To our knowledge, few cases of lobular capillary hemangiomas originating from the nasal cavity have been reported in the English literature.<sup>14</sup> If it originates from the nasal cavity, it is usually seen in the nasal septum. Unlike lobular capillary hemangioma, cavernous hemangioma, originating from the lateral nasal wall, is seen more frequently.<sup>2</sup>

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Microtrauma, pregnancy, and hormonal liabilities are the most common etiologic factors.<sup>1</sup> The tumor generally presents with nasal blockage and epistaxis.<sup>1.6</sup> Surgical excision is the standard method of treatment.

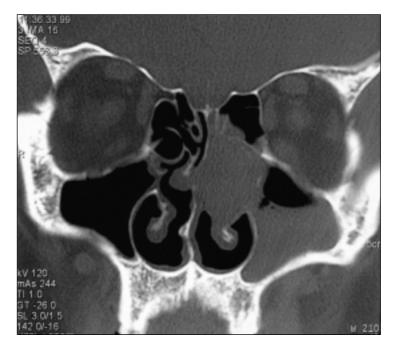
### **Case Report**

An 81-year-old man came to our clinic with a history of recurrent epistaxis and left nasal blockage for 3 months. He had hypertension, and due to chronic atrial fibrillation, he had been given coumadin. In his otorhinolaryngologic examination, a bleeding necrotic mass was seen in the left nasal cavity. Results of the rest of his head and neck examination were unremarkable.

Paranasal computed tomography (CT) scanning of the lesion demonstrated a 2.6 x 1.8 cm solid mass with peripheral contrast enhancement in the left nasal cavity obliterating the maxillary sinus ostium (Figure 1). Whether the mass was benign or malignant could not be determined by CT examination so biopsy was planned. Punch biopsy results reported the mass as an exudative reaction. Endoscopy guided tumor excision was performed. The necrotic vascular lesion originated from the medial surface of the left middle turbinate. The mass was excised en bloc with the middle turbinate, and a biopsy specimen was taken for examination of a frozen section. No signs of malignancy were seen during the frozen section examination.

Gross pathological examination of the specimen revealed a hemorrhagic, polypoid mass measuring 2.7 x 1.3 x 0.8 cm. The cut surface was solid and hemorrhagic. Samples of the mass were embedded in paraffin, and histologic sections were stained with hematoxylin and eosin. Histopathological examination showed a lesion with a vascular lobular pattern of growth in a fibrous stroma. These lobules were formed by vascular spaces surrounded by a proliferation of neoformed endothelial cells (Figures 2A and 2B). High cellularity, cytologic atypia, and mitotic activity were not observed. The surface epithelium was ulcerated in some parts, and beneath the ulcerated area existed inflammation and edema. The lesion was diagnosed as a benign lobular capillary hemangioma.

During postoperative twelve months follow-up the patient did not have any complaints and no recurrence was seen.



**Figure 1.** Paranasal computed tomography of a left nasal mass with peripheral contrast enhancement.

Türk Otolarengoloji Arşivi / Turkish Archives of Otolaryngology, Cilt / Volume 45, Sayı / Number 1, 2007

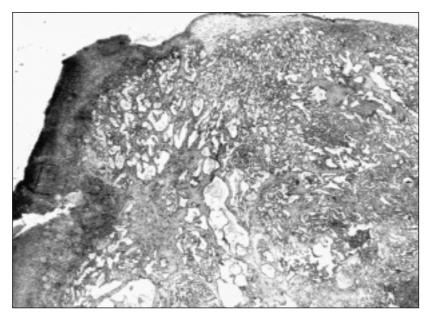


Figure 2A. Low-power microscopic view of lobular capillary hemangioma. Some parts of the surface epithelium were ulcerated (HEx4 original magnification).

# Discussion

It is noteworthy that lobular capillary hemangioma is rarely seen in the nasal cavity, especially in the middle turbinate. This tumor is more frequently seen in the third decade of life; in our case, the patient was in his eighth decade. Microtrauma, pregnancy, and hormonal liabilities are the most common etiologic factors<sup>1</sup> all of which were lacking in our case; our case presented with nasal blockage and epistaxis.

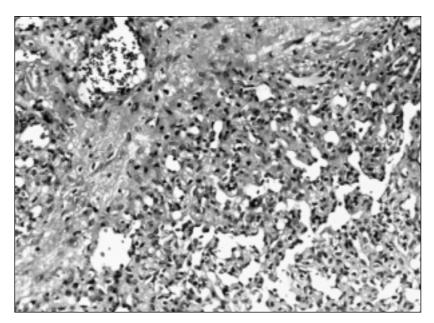


Figure 2B. Note capillary lobules showing endothelial proliferation (HEx20 original magnification).

Capillary hemangioma of the nasal cavity should be considered in the differential diagnosis of epistaxis and nasal blockage. Although rare, epistaxis may be the only symptom. On radiograph alone, capillary hemangioma may not be easily distinguishable from a malignant tumor owing to its macroscopic characteristics. If the clinician is aware of this and suspicious, unnecessary diagnostic tests can be avoided, then a diagnosis of the tumor will not be delayed.

In our case, because we could not distinguish the exact nature of the tumor, we performed a punch biopsy and intraoperative frozen sections for analysis. At the same time, we took note of the necrotic nature and contrast-enhanced presentation of the mass on CT examination. Although we had considered capillary hemangioma in the differential diagnosis, the results of the CT scan and the necrotic appearance of the tumor left some doubt; therefore, performed intraoperative frozen sections to ensure a correct diagnosis.

## Conclusion

Benign capillary hemangioma should be considered in the differential diagnosis of nasal masses. It should be kept in mind that this tumor can present atypically, with no predisposing factors, in old age, in unpredicted locations, and with an ulcerative necrotic appearance, such as in the case reported here.

#### References

- Özcan C, Apa DD, Görür K. Pediatric lobular capillary hemangioma of the nasal cavity. *Eur Arch Otorbinoloryngol* 2004; 261: 449-51.
- Iwata N, Hattori K, Nakagawa T, Tsujimura T. Hemangioma of the nasal cavity: a clinicopathologic study. *Auris Nasus Larynx* 2002; 29: 335-9.
- Kapella M, Panosetti E, Rombaux P, Delos M, Weynand B. Lobular capillary haemangioma of the nasal cavity: observation of three specific cases. Acta Otorbinolaryngol Belg 2001; 55: 241-6.
- Dillon WP, Som PM, Rosenau W. Hemangioma of the nasal vault: MR and CT features. *Radiology* 1991; 180: 761-5.
- 5. Katori H, Tsukuda M. Lobular capillary hemangioma of the nasal cavity in child. *Auris Nasus Larynx* 2005; 32: 185-8.
- Karagama YG, Howarth K, Steel PR, Spencer MG. Lobular capillary haemangioma of the nasal vestibule: a rare entity. *Int J Pediatr Otorbinolaryngol* 2002; 66: 71-5.

**Conflict of interest statement:** *No conflicts declared.* 

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Türk Otolarengoloji Arşivi / Turkish Archives of Otolaryngology, Cilt / Volume 45, Sayı / Number 1, 2007