



Lobular capillary hemangioma of the nasal septum

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ABSTRACT

Numerous vascular tumors may develop in the nasal cavity. These tumors usually present with clinical symptoms such as nasal discharge, epistaxis, and obstruction. Among these, lobular capillary hemangioma, although its etiology is unknown, is generally encountered on the skin, lips, buccal mucosa, tongue, and gums. Capillary hemangioma can be pedunculated or large and is rarely observed in the nasal septum. We present a case with lobular capillary hemangioma located in the nasal septum of a 36-year-old female patient who was admitted with the complaint of epistaxis

Keywords: nasal septum; pyogenic granuloma; lobular capillary hemangioma

INTRODUCTION

Numerous vascular tumors may develop in the nasal cavity. These tumors usually present with clinical symptoms such as nasal discharge, epistaxis, and obstruction. Apart from these symptoms, patients may have to visit outpatient clinics with less common symptoms such as headache, local swelling, and anosmia. Hemangiomas, which are relatively more prevalent in the head and neck region, are fibrovascular tumors.¹ Among these, lobular capillary hemangioma, although its etiology is unknown, is generally encountered on the skin, lips, buccal mucosa, tongue, and gums. Capillary hemangioma can be pedunculated or large and is rarely observed in the nasal septum.² Trauma and hormonal factors are most commonly noted in its etiology.² Lobular capillary hemangioma is also known as pyogenic granuloma.³ We present a case with lobular capillary hemangioma located in the nasal septum of a 36-year-old female patient who was admitted with the complaint of epistaxis.

CASE REPORT

A 36-year-old female was admitted to our clinic with the complaints of intermittent epistaxis and nasal obstruction continuing for approximately a month. The patient had no history of trauma. Anterior rhinoscopy and endoscopic examination revealed a pedunculated mass of approximately 1 cm in diameter originating from the septum in the left Little's area (Figure 1).



Figure 1: A pedunculated mass of approximately 1 cm in diameter originating from the left Little's area of the septum

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Excision was recommended to the patient. This mass was totally excised, including the mucoperichondrium of the originating area, under local anesthesia. Macroscopically, it was a blackish gray, polypoid mass with soft consistency, sized 1 × 0.7 cm (Figure 2).

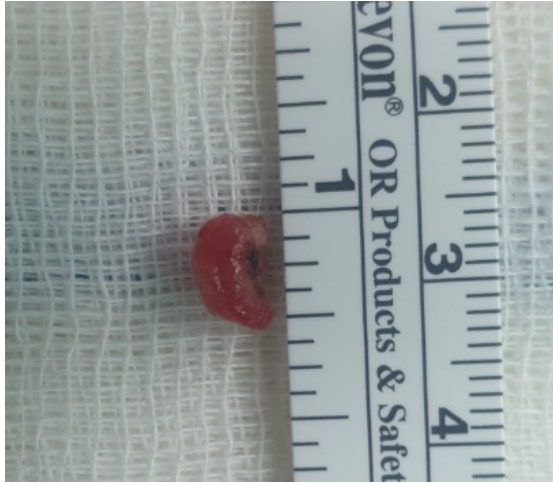


Figure 2: Macroscopic (1 × 0.7 cm), blackish gray, polypoid mass on the outside with soft consistency.

Histopathologically, it showed lobular proliferation of thin-walled capillary blood vessels covered with endothelial cells in the subepithelium. Mass pathology presented as lobular capillary hemangioma (Figure 3). No recurrence was observed in the postoperative follow-ups of the patient.

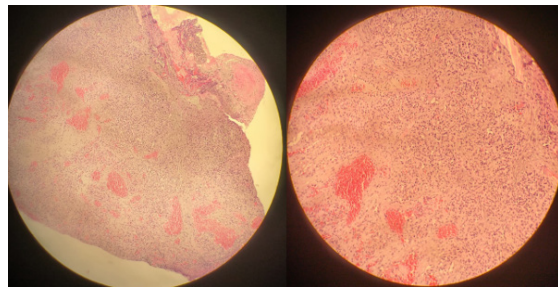


Figure 3: Lobular proliferation of capillary-sized blood vessels.

DISCUSSION

Lobular capillary hemangioma is the polypoid form of hemangioma that can occur at any age and appear on the skin and mucous membranes. It was first defined by Pancet and Dor in 1987.⁴ It is rarely observed in the nasal cavity. In the nasal cavity, it is mostly observed in the Little's area and anterior of the inferior turbinate.^{5,6} Lobular capillary hemangioma of the nasal cavity usually presents with recurrent unilateral epistaxis, nasal congestion, nasal discharge, and rarely, facial pain,

changes in smell, and headache.⁷

Lobular capillary hemangioma is often observed in the third decade and among female patients. Although it is more common among adult females, it is more common among male children.² The development mechanism of the tumor is not fully known. In pathogenesis, several factors such as trauma, cytogenetic factors, hormonal condition, viral oncogenes, production of angiogenic growth factors, and arteriovenous malformations are suspected.^{7,8}

Complete excision of the mass with endoscopic surgical techniques is recommended for treatment.^{3,6} Inadequate excision has been reported as the most common cause of postoperative recurrence.⁹ The recurrence rate of the nasal capillary lobule hemangioma varies between 0%–22.6% in the literature.^{3,10} There is no relationship observed between the risk of recurrence and the performed treatment options. Recurrences can be observed after surgical excision, CO₂ laser excision, cauterization, ligation, and curettage.¹¹

One of the rare complications of pyogenic granuloma is the formation of multiple satellite lesions after the excision of the lesion.¹² Angiogenic factors are thought to play a role in the formation of new lesions after the excision of the primary tumor.¹³ In their cytogenetic study, Truss et al. reported a deletion in the long arm of the 21st chromosome. Genes regulating angiogenesis formation and endothelial proliferation were found in the chromosome region where this deletion occurs.¹⁴

In conclusion, lobular capillary hemangioma, which is one of the many vascular tumors in the nasal cavity, should be kept in mind in the differential diagnosis of patients presenting with epistaxis and nasal obstruction.

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