# Lobular Cavernous Hemangioma of nasal cavity: A rare cause of epistaxis.

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**Abstract:** Lobular capillary hemangioma is a benign, rapidly growing lesion of the skin and mucous membranes. The nasal cavity is a rare location. It may present as a mass entirely filling the nasal cavity. The most common symptoms are nasal obstruction and epistaxis. Although it has no predilection for age, it is more common in the third decade and in females. We present a case report of a 27-year-old male patient with lobular capillary hemangioma who presented with epistaxis and nasal obstruction. The diagnosis of capillary hemangioma must always be kept in mind when discussing the differential diagnosis of a rapidly growing bleeding mass of the nasal cavity even though it is a rare entity.

Keywords: Cavernous haemangioma, Epistaxis, Nasal cavity.

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I. Introduction

Lobular cavernous haemangiomas (LCH) are benign vascular tumors, which originate in the skin and mucous membranes. The oral cavity has been reported to be a common site of involvement, while it is rarely located in the nasal cavity.<sup>1</sup> Exactetiopathogenesis of LCH formation is not known. It was first described as human botryomycosis by Poncet and Dor in 1897.<sup>1,2</sup>It may be pedunculated or broad-based and can vary in size from a few millimeters to several centimeters.<sup>1</sup> We emphasize that in the differential diagnosis of a bleeding mass filling the nasal cavity, the rarely seen LCH must be included.

### II. Case Report

27 years old male presented to the Out Patient department with chief complaints of bleeding from right nasal cavity since 1 week which is sudden, intermittent and profuse. Past history revealed similar complaints which subsided on medication. He had taken tranexemic acid injections which stopped the bleeding. Laboratory examination, complete blood count and routine blood chemistry were within the normal range. On Diagnostic Nasal Endoscopy right nasal cavity showed black colored fleshy mass which bleeds on touch. Left nasal cavity was normal. Complete resection of the tumor was achieved by trans-nasal endoscopic surgery and the bleeding was controlled with a coagulation-suction device as well as with a light packing, which was removed 2 days later without recurrence of bleeding. The precise site of origin of this tumor was the mucous membrane of the left middle nasal meatus and was determined only during the procedure.Histopathological study of the tumor showed large blood-filled spaces lined withflattened endothelium and the tumor was found to be a cavernous haemangioma(Figure 1,2).

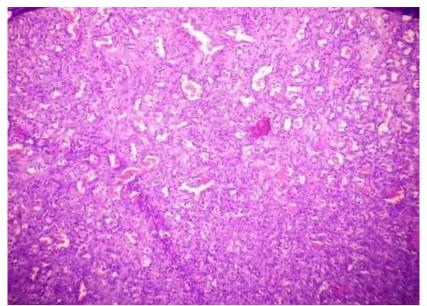


Figure 4: Low power view of section with mucosa showing lobules of irregularly shaped vascular spaces and ramifying capillaries.(H&E)

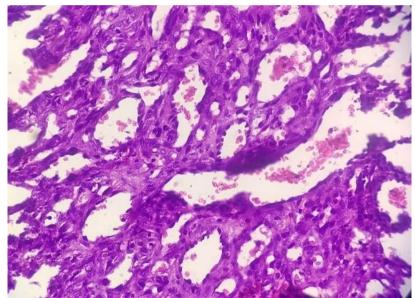


Figure 5: High power view showing cellular areas with tightly packed capillaries with plump endothelial lining. (H&E)

## III. Discussion

Lobular capillary Haemangioma (LCH) is a benign lesion occurring in the skin and mucous membranes. It is considered to be an acquired vascular tumor. The description of the lesion by Miller as LCH was based on its characteristic histopathological findings.<sup>3</sup> LCH is more common in the third decade and in females. But LCH may appear in all ages and in males as seen in our case. The most common sites of mucosal LCH are the gingival, lips, tongue, and buccal mucosa. Nasal cavity involvement is unusual, with the anterior portion of septal mucosa and the tip of turbinate being the most frequently involved areas in the nasal cavity.<sup>2,3</sup> LCH of the nasal cavity usually presents with recurrent unilateral epistaxis, nasal obstruction, nasal discharge and rarely with facial pain, alteration of smell, and headache.<sup>4</sup>When LCH presents in its usual form as a hypervascularised small mass located in the anterior portion of nasal cavity, the diagnosis in not difficult. On endoscopy, the lesion is usually seen as a red to purple solitary mass with predilection for the anterior portion of the nasal septum.<sup>5</sup>Also, LCH can rarely present as a mass of considerable size and thus entirely fill the nasal cavity; such lesions have been termed as giant LCH.<sup>4,6</sup>The differential diagnosis of intranasal LCH includes nasal polyp, antrochoanal polyp, meningoencephalocele, sarcoidosis, Wegener's granulomatosis, papilloma, Kaposi's sarcoma, hemangiosarcoma, squamous cell carcinoma and mucosal malignant

melanoma.<sup>7</sup>Histologically, LCH has characteristics consistent with polypoidal, circumscribed, exophytic and lobular proliferation of capillaries in a fibromyxoidstroma. While large vessels and surrounding aggregates of small size capillaries from the lobules, overlaying epithelium is ulcerated or atrophic.<sup>8</sup> Total excision of the lesion is recommended and is best done by endoscopic surgery techniques.<sup>3,9</sup> Recurrences are rare, and no malignant potential have been reported.<sup>1,3</sup>

## **IV.** Conclusion

LCH is quite a rare lesion of unknown etiology especially when it occurs in the nasal cavity. It should always be considered in the differential diagnosis of vascular lesions within the nasal cavity.

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