



¹Sandeep Kumar Jha, ¹Debajyoti Roy, ¹Arijit Pal, ²Shilpa Jha

¹IQ City Medical College and Narayana Multispecialty Hospital

²Command Hospital-EC India

Lobular Capillary Hemangioma of Nose: case report and literature review

Introduction

The etiopathogenesis of lobular capillary hemangioma (LCH) has been a matter of debate. Most common causes attributed to its development are hormonal and traumatic. Furthermore, this entity most commonly affects the skin and mucosal surfaces of oral cavity. Nasal manifestation of this entity, though reported in literature, is rare. We present here two cases of Lobular capillary hemangioma manifesting in nose with history of recurrent nasal bleed – leading to transfusion of 4 units of packed cell in one patient. The aim of this report is to emphasize the importance of endoscopic examination in cases with nasal bleed and to suggest keeping Lobular capillary hemangioma as a possible differential diagnosis in such cases.

Case 1

A 35 year old lady presented to the Department of Otorhinolaryngology and Head & Neck surgery, IQ city Medical College and Narayana Multispecialty Hospital with the complaint of recurrent nasal bleed for past 3 months. The bleeding was profuse, spontaneous and had caused her Hemoglobin levels to drop to 7 gm%. She was receiving treatment elsewhere and had undergone nasal packing multiple times without any definitive diagnosis. After the last episode she was admitted in a nursing home near her house and was transfused 4 units of packed cell in view of the massive bleed.

The patient presented to our department with active bleeding. As the bleeding was profuse, precluding a proper nasal examination, anterior nasal packing was performed to control the bleed. Thereafter, a coagulation profile was done and supportive measures in the form of fluids, antibiotics and analgesics were instituted. She received another unit of packed cells. The blood reports and coagulation profile were found to be normal.

48 hours later the anterior nasal packs were removed carefully, and a thorough examination of nasal cavity was performed using a rigid nasal endoscope. The endoscopic examination revealed a lobulated mass attached to the lateral wall of nose (fig 1), just above the attachment of the anterior part of the inferior turbinate. A Computed tomographic scan revealed no other mass lesions or bony erosions.

Considering the severity of bleed on previous occasion, the mass was excised in toto under general anaesthesia. Histopathological examination showed it to be a Lobular Capillary hemangioma (fig 2). The patient was asymptomatic with a normal endoscopic picture till her last visit, 6 months post operatively.

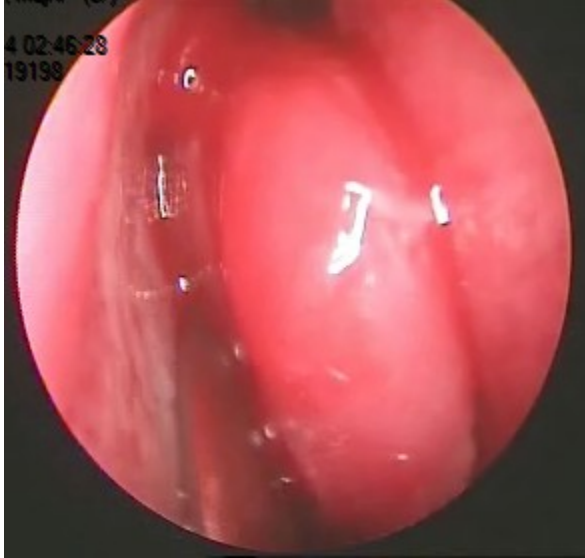


Fig 1: A pedunculated mass arising from lateral wall of nose with attachment above the anterior part of inferior turbinate. It was excised in toto. Histopathological examination showed it to be a Lobular Capillary Hemangioma

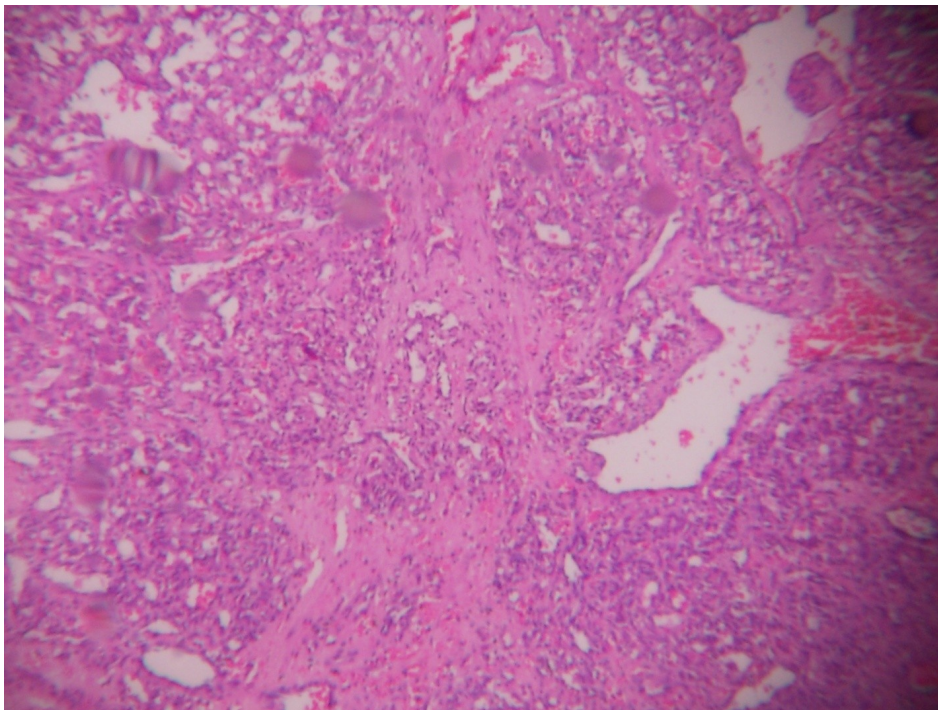


Fig 2: Histopathological examination shows dilated capillary sized channels in lobulated pattern, and stroma is edematous with infiltration of inflammatory cells. Features suggestive of Lobulated Capillary Hemangioma

Case 2

A 65 year old lady presented to the Department of Otorhinolaryngology and Head & Neck surgery, IQ city Medical College and Narayana Multispecialty Hospital with the history of recurrent nasal bleed through left nostril for past 1 year. The bleeding was spontaneous and used to soak her handkerchief. She had undergone examination at multiple centers but no definitive diagnosis was made. Coagulation profile and Computed tomographic scans were also performed but turned out to be normal.

A diagnostic nasal endoscopy at our center revealed a small reddish mass on the anterior surface of the left middle turbinate (fig 3). The mass was excised in toto and sent for histopathological examination. It was reported to be a Lobular capillary hemangioma (fig 4). The patient was asymptomatic with a normal endoscopic picture, 6 months post operatively

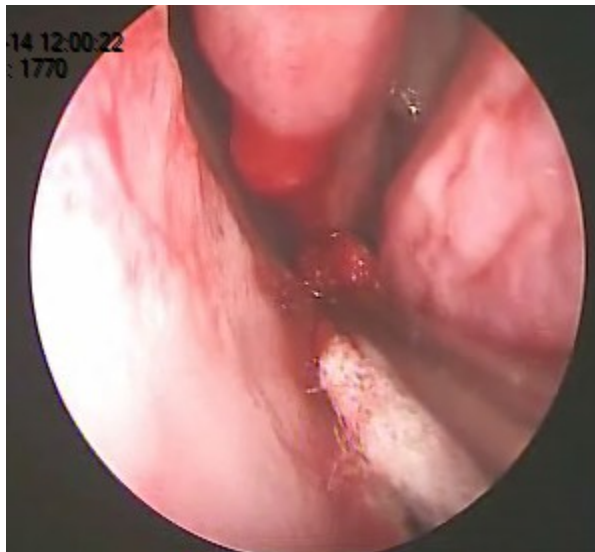


Fig. 3: A small growth arising from the left middle turbinate which bleeds on touch. It was excised in toto. Histopathological examination showed it to be a Lobular Capillary Hemangioma

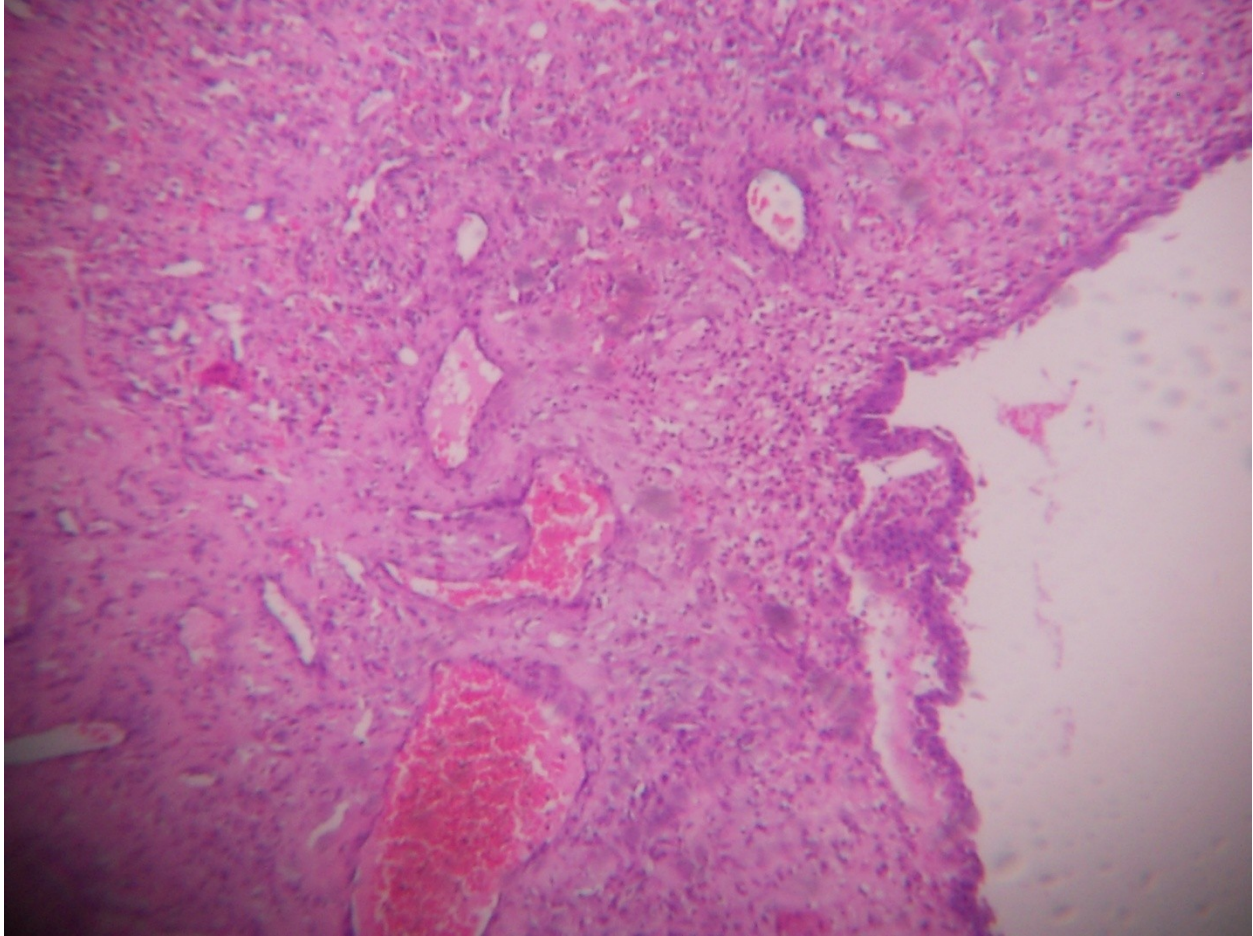


Fig 4: Microscopic examination shows surface epithelial lining of ciliated columnar epithelium and underneath submucosa reveals lobular arrangements of capillaries of varying sizes. There was no intercommunicating vascular channel or piling up of endothelial cells. The surrounding stroma shows edema and mixed chronic inflammatory infiltrate. Features suggestive of Lobulated Capillary Hemangioma.

Discussion

Lobular Capillary hemangioma aka pyogenic granuloma is a rare benign capillary hemangioma of unknown etiology. It was first described by Poncet and Dor [1] in 1897 as Botryomycose humane. The entity of lobular capillary hemangioma is usually seen to affect the skin and mucosal surfaces of oral cavity. Its presentation in nasal cavity is a rarity although reported in literature on and off. In their review of 639 vascular lesions of the oral cavity and upper respiratory tract, Mills et al [2] found that 73 cases had characteristic features of LCH. The lip was the most common site (38%), followed by the nose (29%), oral mucosa (18%), and tongue (15%).

The LCH is commonly found to arise from the septum [3-5], but may rarely arise other sites like vestibule [5, 6], and columella [7] and middle turbinate [8] as reported in our 2nd case. The origin of the LCH from the lateral nasal wall above the attachment of inferior turbinate, as described in our first case has not been reported so far.

LCH usually presents as a spontaneous, painless, bleeding mass. There is a predilection for males less than 18 years old, females in the reproductive years, and an equal sex distribution beyond 40 years of age. Although usually found in 3rd decade of life, cases have been reported in infants [9] and kids [10-12].

Various treatment modalities have been described for this condition like intralesional steroid injection [9], harmonic scalpel [13], but surgical excision under endoscopic control remains the treatment of choice [5].

In dealing with these lesions care should be taken to rule out malignancy and other lesions like glioma [14].

Conclusion

LCH though a rare lesion in the nasal cavity should be considered as a differential diagnosis in the cases with hemorrhagic nasal mass. Further, we would like to emphasize the importance of detailed endoscopic examination, as it may help in locating small mucosal lesions that may not be seen on computed tomographic scans. Lobular capillary hemangioma, although a surgically amenable condition, may cause life threatening bleed, and therefore should be managed with utmost care and diligence.

References:

1. Poncet A, Dor L. Botryomycose humaine. Rev Chir (Paris) 1897;17:996-7
2. [Mills SE](#), [Cooper PH](#), [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 Oct;4(5):470-9
3. el-Sayed Y, al-Serhani A. Lobular capillary haemangioma (pyogenic granuloma) of the nose. J Laryngol Otol. 1997 Oct; 111(10):941-5.
4. [Lazar CC](#), [Costentin B](#), [François A](#), [Marie JP](#), [Dehesdin D](#). "Bleeding polyp" of the nasal septum: an uncommon lesion in adults. [Ann Otol Rhinol Laryngol](#). 2004 Aug; 113(8):652-4.
5. Puxeddu R, Berlucchi M, Ledda GP, Parodo G, Farina D, Nicolai P. Lobular capillary hemangioma of the nasal cavity: A retrospective study on 40 patients. Am J Rhinol. 2006 Jul-Aug; 20(4):480-4.
6. [Karagama YG](#), [Howarth K](#), [Steel PR](#), [Spencer MG](#). Lobular capillary haemangioma of the nasal vestibule: a rare entity. [Int J Pediatr Otorhinolaryngol](#). 2002 Oct 21;66(1):71-5.
7. [Bora H](#), [Bandyopadhyay SN](#), [Sinha R](#), [Bhunia R](#), [Mukherjee S](#), [Das KK](#), [Mukherjee PB](#). Large capillary haemangioma arising from the nasal columella--a case report. [J Indian Med Assoc](#). 2001 May; 99(5):269-70.
8. [Kurtaran H](#), [Uraldi C](#), [Ark N](#), [Aktaş D](#). Lobular capillary haemangioma of the middle turbinate. [Acta Otolaryngol](#). 2006 Apr;126(4):442-4.
9. [Tasca RA](#), [Williams RG](#). Capillary haemangioma of the nasal cavity in a 7-week-old baby--successful treatment using intralesional steroid injection. [Int J Pediatr Otorhinolaryngol](#). 2004 Mar; 68(3):365-7.
10. [Ozcan C](#), [Apa DD](#), [Görür K](#). Pediatric lobular capillary hemangioma of the nasal cavity. [Eur Arch Otorhinolaryngol](#). 2004 Sep; 261(8):449-51. Epub 2003 Dec 3.
11. [Katori H](#), [Tsukuda M](#). Lobular capillary hemangioma of the nasal cavity in child. [Auris Nasus Larynx](#). 2005 Jun; 32(2):185-8. Epub 2005 Mar 23.
12. [Benoit MM](#), [Fink DS](#), [Brigger MT](#), [Keamy DG Jr](#). Lobular capillary hemangioma of the nasal cavity in a five-year-old boy. [Otolaryngol Head Neck Surg](#). 2010 Feb;142(2):290-1. doi: 10.1016/j.otohns.2009.09.035.
13. [Kodama S](#), [Yoshida K](#), [Nomi N](#), [Fujita K](#), [Suzuki M](#). Successful treatment of nasal septum hemangioma with the Harmonic Scalpel: a case report. [Auris Nasus Larynx](#). 2006 Dec; 33(4):475-8. Epub 2006 Sep 6.
14. Hoeger PH, Schaefer H, Ussmueller J, Helmke K. Nasal glioma presenting as capillary haemangioma. Eur J Pediatr. 2001 Feb;160(2):84-7