

# CASE REPORT

## CAPILLARY HAEMANGIOMA OF NASAL SEPTUM: A CASE REPORT

V.P. Narve<sup>1</sup>, Manish Kumar Sachan<sup>2</sup>, Kavish Jhawar<sup>3</sup>, Rajveer Basu<sup>4</sup>, Freni J.K<sup>5</sup>

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**ABSTRACT:** Capillary haemangioma is a benign rapidly growing lesion characterized by a proliferation of capillaries arranged in lobules and separated by a loose connective tissue stroma, often infiltrated by inflammatory cells. Most mucosal capillary haemangioma of head and neck arise in the oral cavity, but the nasal cavity involvement is rare. The most common symptoms are unilateral epistaxis and nasal obstruction. The treatment of choice is surgery to remove the tumour even for large lesion.

**KEY WORDS:** lobular capillary haemangioma, Nasal septum

**INTRODUCTION:** Haemangioma is a benign neoplasm of vascular phenotype. Usually, congenital lesions are located on the skin or oral mucosa while the nasal cavity and paranasal sinuses are uncommon site for haemangioma. In nasal cavity septum is most commonly affected followed by inferior turbinate.<sup>1</sup>

Age range from 10 months to 72 years with mean age of 42 years and peak incidence in 5<sup>th</sup> decade of life. No gender preponderance was observed. The etiopathogenesis of lobular capillary haemangioma is still obscure, trauma, hormonal influence, viral oncogenes, underlying microscopic arteriovenous malformation and production of angiogenic growth factors have been all advocated as potential etiopathogenic factor.<sup>2</sup> Epistaxis and nasal obstruction are the most marked symptoms<sup>1</sup>. Surgical excision is the treatment of capillary haemangioma. Intraoperative frozen section may be necessary to confirm the diagnosis.<sup>2</sup>

**CASE REPORT:** A 21 years old female presented with mass in right nasal cavity, nasal obstruction and nasal bleeding for 1 month, no history of trauma and previous surgery.

On Examination: A reddish mass present in right nasal cavity, does not bleed on touch, insensitive to touch, probe can pass superiorly and inferiorly and restricted on lateral aspect. All investigations are within normal limit.



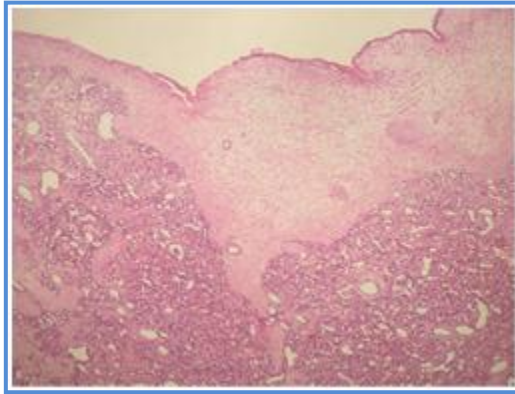
Clinical photogram showing mass in right nasal cavity on septum



Followup

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Histological section showing the typical lobular pattern of capillary hemangioma. The capillary vein ordered in clusters within the loose stroma are observed

**DISCUSSION:** Haemangioma are benign tumour that originate in the vascular tissue of skin mucosa, bone, muscle and gland.<sup>3</sup> It grow rapidly, regress slowly and never recur. Haemangioma accounts for about 20% of all benign neoplasm of the nasal cavity, in nasal cavity most commonly on septum 65%, lateral wall 18%, and vestibule 16%.<sup>3,4,6,8</sup>

Haemangioma of nasal cavity also known as capillary Haemangioma, Pyogenic Granuloma, Lobular Capillary Haemangioma and Epulis Gravidarumn.<sup>1,3</sup>

Lobular capillary haemangioma is seen in both gender and almost in every age; however it is most common in female and in 3<sup>rd</sup> decade.<sup>5</sup>

They are classified as capillary, cavernous and mixed lesion. there are three stages of haemangioma:-

1. Proliferating phase(0 to 1 year of age)
2. Involuntary phase(1 to 5 year of age)
3. Involved phase(more than 5 year of age)<sup>4,3,7</sup>

Lobular capillary haemangioma is commonly seen in oral cavity especially on gingiva and rarely in nose. When it is seen in nasal cavity mostly located on anterior part of nasal septum (Littles Area), less frequently on anterior side of inferior turbinate.<sup>8, 9</sup>

No mechanism for the development of the Lobular capillary haemangioma has so far been defined. However trauma, hormonal influence, viral oncogene, underlying microscopic arteriovenous malformation and production of angiogenic growth factors have been suspected to act in pathogenesis.<sup>6, 7, 10</sup>

Epistaxis and nasal obstruction are the most marked symptoms in case of nasal Lobular capillary haemangioma. It can be pedunculated or wide based. Its size ranges from several millimeter to centimeter.<sup>7</sup>

Haemangioma should be distinguished from granulation tissue, telangiectasia, rhinosporidiosis, vascular malformation, vascular polyp, angiofibroma, glomus tumour, lymphangioma, Kaposi sarcoma and angiosarcoma.<sup>3, 6, 7, 10</sup>

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Histologically, it is characterized by submucosal vascular proliferation arranged in lobular or clusters composed of central capillaries and smaller ramifying tributaries. Proliferating lesion consists of endothelial cells, fibroblast cells and mast cells.<sup>8</sup>

Total excision of the lesion by either classical or endoscopic surgery technique has been recommended.<sup>11, 12</sup>

Application of endonasal endoscopic surgery is constantly evolving. One of the advantage of this technique is that it does not involving any facial skin incision and better tolerated by the patient. This surgical approach involve shorter hospitalization.<sup>6, 7, 11, 12</sup>

In the very recent literature, all patients with a large lesion have been managed without preoperative embolization and none has experienced blood loss requiring transfusion.<sup>7</sup>

Recurrence are uncommon and no malignant transformation have been reported.<sup>9, 13, 14</sup>

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## REFERENCE:

1. Valencia MP, Castillo M. Congenital and acquired lesions of the nasal septum: A practical guided for differential diagnosis. *Radiographics* 2008; 28:205-33.
2. Cummings Otorhinolaryngology: Head and neck surgery, 5th Edition, Vol. I, Page 725.
3. Nedev P. Lobular capillary haemangioma of the nasal cavity in children - Literature survey and case report, *Trakia Journal of Sciences* 2008; 6(1):63-7.
4. Zarrinneshan A, Zapanta P, Wall SJ. Nasal pyogenic granuloma. *Otolaryngology - Head and Neck Surgery* 2007; 136:130-1.
5. Ahmad MM, Bassiouny AL. Lobular capillary hemangioma of the nasal cavity in pregnancy. *Med J Cairo Univ, Vol. 78, No. 1, June 2010:237-240.*
6. Takeda K, Takenaka Y, Hashimoto M. Intraosseous haemangioma of the inferior turbinate. *Case report in medicine*, 2010.
7. Puxeddu P, Berlucci M, et al. Lobular capillary haemangioma of the nasal cavity: A retrospective study on 40 patients. *Am J Rhinol* 2006; 20: 480-4.
8. Sheen TS, Ko JY and Hsu YH. Pyogenic granuloma. An uncommon complication of nasal packing. *Am J Rhinol*, 11:225-7, 1997.
9. Lee HM, Lee SH and Hwang SJ. A giant pyogenic granuloma in the nasal cavity caused by nasal packing. *Eur Arch Otorhinolaryngol*, 259:231-3, 2002.
10. Nair S, Bahal MA, Bhadauria. Lobular capillary hemangioma of nasal cavity. *MJAFI* 2008; 64:270-271.
11. Archontaki M, Stamou, et al. Cavernous haemangioma of the left nasal cavity. *Acta otorhinolaryngologica italica* 2008; 28:309-11.
12. Ahmad R, Norie A. Endonasal endoscopic resection of intranasal haemangioma. *Med J Malaysia* 2006; 61(5).
13. Miller FR, D'Agostino MA, Schlak K. Lobular capillary hemangioma of the nasal cavity. *Otolaryngol Head Neck Surg* 1990; 120:783-4.

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14. Ozcan C, Apa DD, Gorur K. Pediatric lobular capillary hemangioma of the nasal cavity. Eur Arch Otorhinolaryngol 2004; 261:449-51.

## **AUTHORS:**

1. V.P. Narve
2. Manish Kumar Sachan
3. Kavish Jhawar
4. Rajveer Basu
5. Freni J.K.

## **PARTICULARS OF CONTRIBUTORS:**

1. Associate Professor & HOD, Department of ENT, G.R. Medical College & J.A Group of Hospitals, Gwalior, M.P.
2. PG Third Year Student, Department of Otorhinolaryngology, Gajra Raja Medical College, Gwalior (M.P.)
3. PG Second Year Student, Department of Otorhinolaryngology, Gajra Raja Medical College, Gwalior (M.P.)

4. PG Third Year Student, Department of Otorhinolaryngology, Gajra Raja Medical College, Gwalior (M.P.)
5. PG Second Year Student, Department of Otorhinolaryngology, Gajra Raja Medical College, Gwalior (M.P.)

## **NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:**

Dr. V.P. Narve,  
Associate Professor & HOD,  
Department of ENT,  
G.R. Medical College & J.A Group of Hospitals,  
Gwalior, M.P. – 474009.  
Email- drvpnarve@gmail.com

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