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Congenital Lobular Capillary Hemangioma of Nasalseptum in a 4 Year Old Child – A Case Report

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Shaswati Sengupta [§] & SK Basu ^χ

Abstract- Lobular capillary haemangioma is a benign, rapidly growing lesion of skin and mucus membrane. It usually involves gingiva, lips, tongue, and buccal mucosa. Nasal cavity is a rare location. Generally cases of haemangioma have been reported in children with epistaxis and nasal obstruction. We report a case of a 4yr old boy with congenital lobular capillary haemangioma of nose without epistaxis.

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I. INTRODUCTION

Capillary haemangioma are hamartomas and most commonly arise in head and neck, affects 2.6% of all live births.¹ They are noted soon after birth as pink to red macular lesion that rapidly increase in size¹. The lesion becomes raised, popular or polypoidal¹. Then they enter a quiescent phase and subsequently regress with 70% disappearing by the age of seven.¹

Lobular capillary haemangioma is a benign, rapidly growing lesion with microscopically distinctive lobular structure that affects the skin and mucus membrane of oral cavity.² Gingiva, lips, tongue, buccal mucosa have been reported to be common sites of involvement. It was first described as 'botryomycosis' by Poncet and Dort in 1897.³ It is rarely located in the nasal cavity. The most common site in the nose is nasal septum ^{4, 5}. It affects males more than females.⁶ Micro trauma and hormonal factors are the most common etiological factors. In a typical presentation, lobular capillary haemangioma appears at endoscopy as a red to purple mass not larger than 1cm associated with epistaxis. However, in more rare instances the lesion reaches a considerable size filling the nasal cavity and leading to a complaint of nasal obstruction. The treatment is nasal endoscopic surgery⁷.

We present a case of a 4yr old boy with intranasal lobular capillary haemangioma since birth, with nasal obstruction but without any complaint of nasal bleeding. It is considered in differential diagnosis

of childhood endonasal mass without bleeding like dermoid cyst, nasoalveolar cyst, nasolacrimal cyst, meningocele, encephalocele, glioma, chordoma etc.¹

II. CASE REPORT

A 4yr old boy came to the outpatient department of a tertiary care hospital with a swelling in left side nasal cavity. According to his mother it was there since birth and progressively increasing in size with age. Patient had only complaint of nasal obstruction. There was no history of epistaxis, nasal discharge, and disturbance of smell, headache, facial pain or change of voice. Local examination of Ear, Throat, Head & neck was within normal limits. There were no enlarged neck glands or palpable neck nodes.

On anterior rhinoscopy, a non-tender greyish-white mass with smooth surface and soft consistency was seen in left side of nasal cavity. There was no nasal discharge or sinus tenderness. Diagnostic nasal endoscopy showed its attachment to the antero-inferior portion of septum partially obstructing the left nasal passage. Also there was mild DNS to right. (Figure 1)

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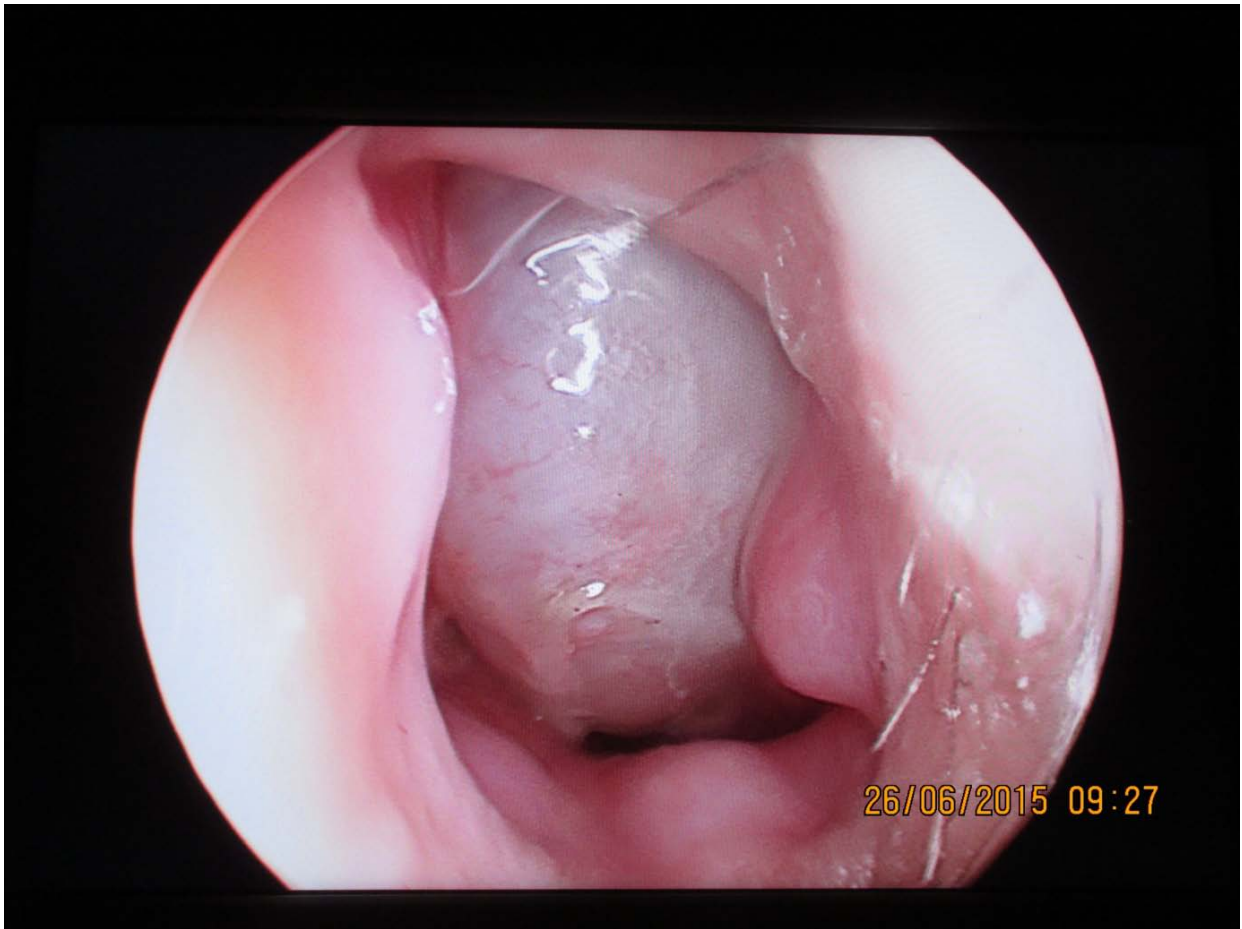


Figure 1: Endoscopic picture of Lobular capillary Haemangioma

Computed tomography scan of nose and paranasal sinuses revealed a wide-based soft tissue mass arising from anteroinferior portion of septum in left side of nasal cavity without any intracranial connection. There was no extension of the mass into paranasal sinuses. Septum was deviated to right. (Figure 2)



Figure 2 : CT scan showing the mass attached to the septum

Magnetic resonance imaging showed an elliptical non enhancing cystic lesion being hyper in T2 and STIR, hypo intense in T1 seen in anterior aspect of left side of nasal cavity, abutting adjacent parts of nasal septum and middle turbinate. The lesion measures about 22mmx9mmx13mm.

Endonasal endoscopic excision of the lesion was planned under general anaesthesia. The nasal mass was completely resected with a rim of normal septal mucoperiosteum and perichondrium under GA. There was no need for any perioperative blood transfusion. The surgical specimen was sent for histopathological examination. (Figure 3)



Figure 3 : specimen of Lobular capillary Haemangioma after excision

On gross examination, mass was whitish with smooth surface measuring 2x1.2 cm in size. On histopathological examination, section shows a lesion composed proliferating capillaries of various size lined

by flattened endothelium lying in a fibrous stroma suggestive of lobular capillary haemangioma. There was no evidence of malignancy. (Figure 4)

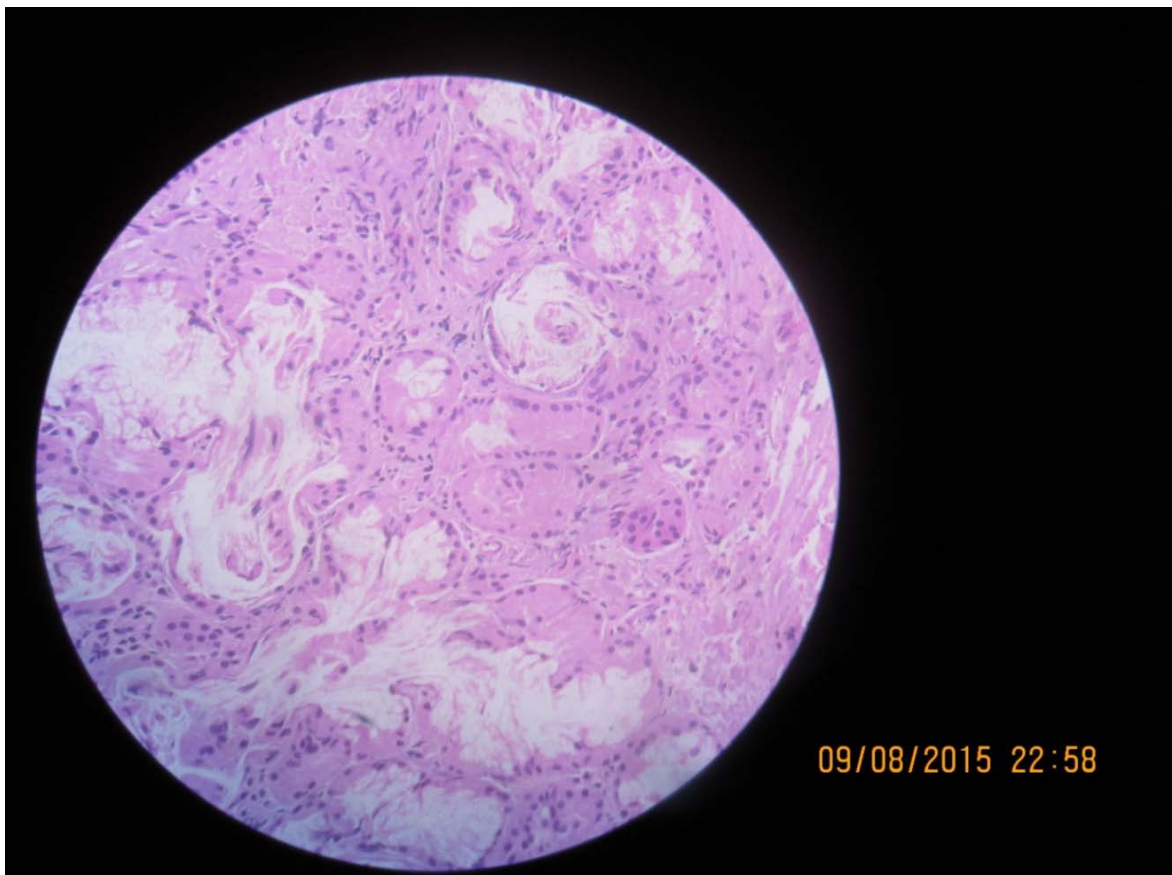


Figure 4 : Histopathology showing features of haemangioma

The patient has been followed up for a period of one year, and there is no recurrence of growth.

III. DISCUSSION

Capillary haemangioma are hamartoma, most commonly arise on head and neck affecting 2.6% of all live births¹. They are noted soon after birth as pink to red macular lesion that rapidly increase in size.¹the lesions become raised, popular or polypoidal, then enter a quiescent stage and subsequently regress with 70% disappearing by the age of seven.¹

LCH was first described by Poncet and Dor in the year of 1897 where they referred these tumours as small vascular tumours in finger of four patients.³the authors referred to this condition as human botryomycosis thinking that the lesions were secondary to fungal infection.

In 1904, Hanzliel coined the term pyogenic granuloma to describe these lesions which he suggested to be granulation tissue arising in response to bacterial infection.⁸ In 1980 Mills et al propose the term lobular capillary haemangioma derived from its characteristic microscopic features.⁹

Aetiology of LCH remains unclear but trauma and hormonal influences are considered to be the main factors. A retrospective study of 112 patients by Pagliai and Cohen shows a history of trauma in 5% with clinically diagnosed as LCH.¹⁰ other possible aetiologies are viral oncogenes, microscopic AV malformations and over production of angiogenic growth factors.¹¹

There is a well-established relationship between LCH and pregnancy. LCH commonly occurs in women who are pregnant and those who use oral contraceptives. These signs regress after delivery indicating a role of hormone in the growth of LCH.¹²

Patients with LCH commonly present with nasal obstruction and epistaxis. In our case, patient only presented nasal obstruction. The differential diagnosis for nasal mass without any epistaxis will be meningocele, dermoid cyst, glioma, and polyp. These can be differentiated by CT scan and MRI.

Recommended treatment of LCH in nasal cavity is endoscopic guided local excision with cautery at the base of tumour for hemostasis.¹⁰ this technique is associated with lower rate of recurrence.^{9, 10}

IV. CONCLUSION

LCH is a rare lesion when it occurs in a nasal cavity. The exact is unknown. It may not be always presented with epistaxis or red colour polypoidal mass. It can be considered as a differential diagnosis of intranasal mass causing obstruction but no bleeding.

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