



## A Case of Large Nasal Vestibular Mass presenting with Nasal Obstruction and Epistaxis

### ABSTRACT

Nasal vestibular mass are not commonly seen in ENT practice. We are presenting a patient with a large right nasal vestibular mass, who complained of nasal obstruction and epistaxis. Differential diagnosis of the similar growths in the nasal vestibule with their pathology and the treatment options, have been reviewed from the literature.

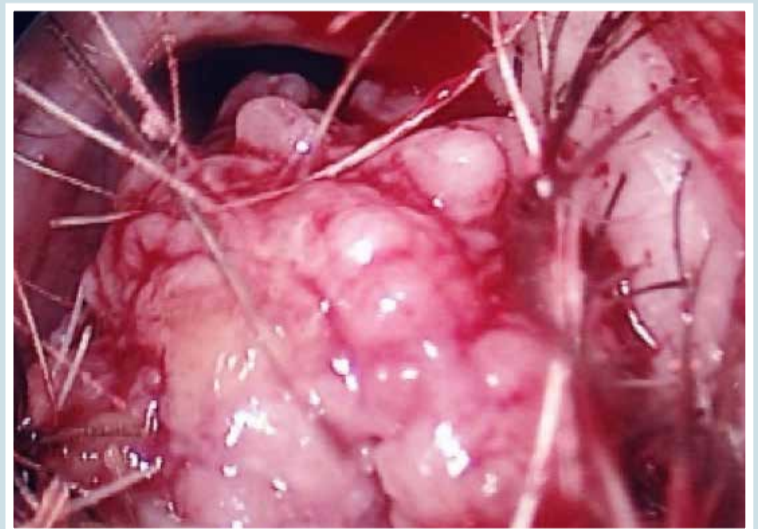
**KEYWORDS:** Nasal vestibular mass, papilloma, 0 and 30 degree endoscopes, lateral rhinotomy



**Pre-test CME Quiz**

### Case presentation

A fifty five year old male presented with nasal obstruction on right side with occasional epistaxis for the past one year. On examination there was proliferative growth in the right nasal vestibule (Figure 1). The biopsy of growth showed papilloma. A CT scan of the nose was performed to see the extent of growth (Figures 3 and 4). The growth (Figure 2) was removed completely using 0 and 30 degree endoscopes. The Biopsy was reported as Villous papilloma (Figures 5 and 6).



**Figure 1:** Right nasal vestibule showing the proliferative growth



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## Discussion

### Anatomy

The nasal vestibule is the entrance to the nasal cavity (Figure 7). It is lined by skin in which there are numerous hair follicles and sebaceous glands. The vestibule is a three-sided, pear-shaped cavity about 1.5 cm in diameter that ends posteriorly at the limen nasi. The alar cartilages form the anterolateral wall. The medial wall is the columella, formed by the medial wing of the alar cartilage and the anterior portion of the cartilaginous septum. The floor is the maxilla.

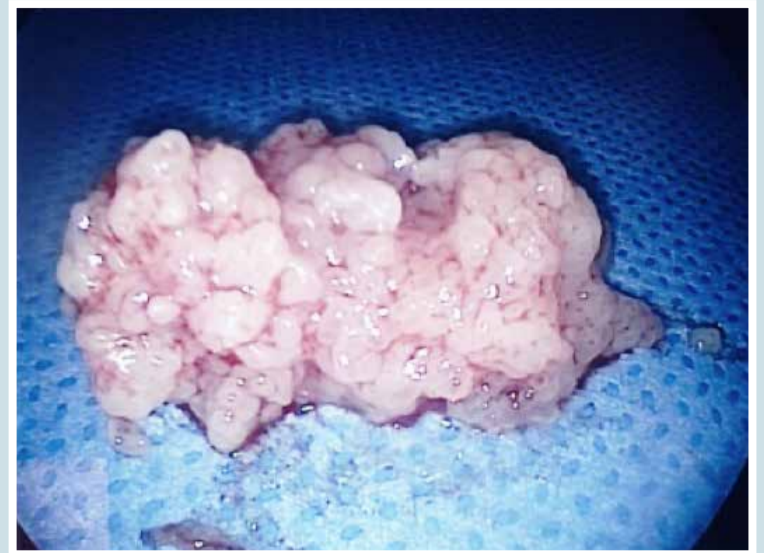
Rhinolith is calcified mass with or without a foreign body found in the nasal cavity is common cause for vestibular mass.<sup>5</sup> Other common lesions are papillomas arising from skin, furunculosis of nasal vestibule, sebaceous cyst of nasal vestibule. Skin tumours like Melanoma, Basal cell carcinoma, Squamous cell carcinoma and Keratoacanthoma from nasal vestibule have been reported. Most of the mass in nasal vestibule are benign so surgery is the treatment of choice.

Nasal vestibular mass is a rare cause for nasal obstruction. Those mass can be benign or malignant. Benign teratoma of nasal septum are congenital can appear due to the presence of all the three germ layers (totipotent cells) when present in the neo-



#### Key Point

The nasal vestibule is the pear shaped entrance to the nasal cavity. It is lined by skin in which there are numerous hair follicles and sebaceous glands.



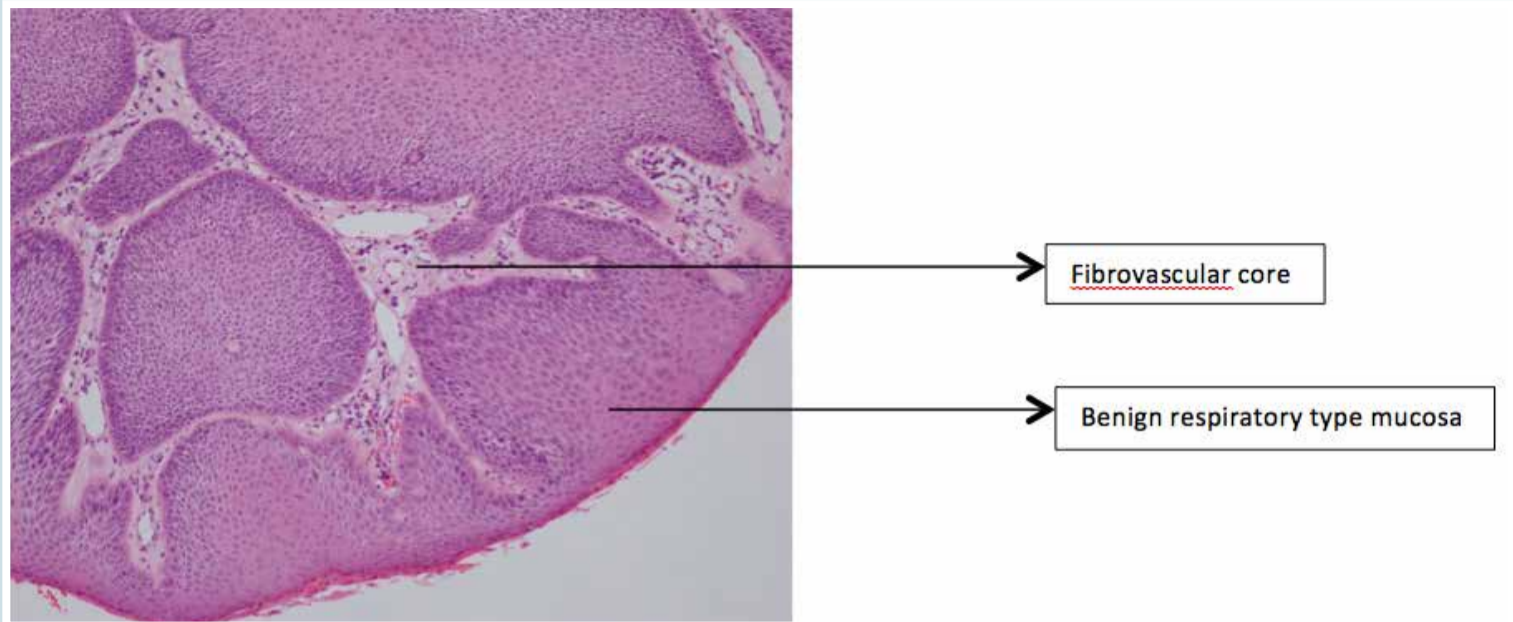
**Figure 2:** Specimen of the proliferative growth excised completely.



**Figure 3:** Axial view of CT scan showing vestibular growth on the right side



**Figure 4:** Sagittal view of a CT scan showing a vestibular mass



**Figure 5:** Histopathology of papilloma in higher magnification

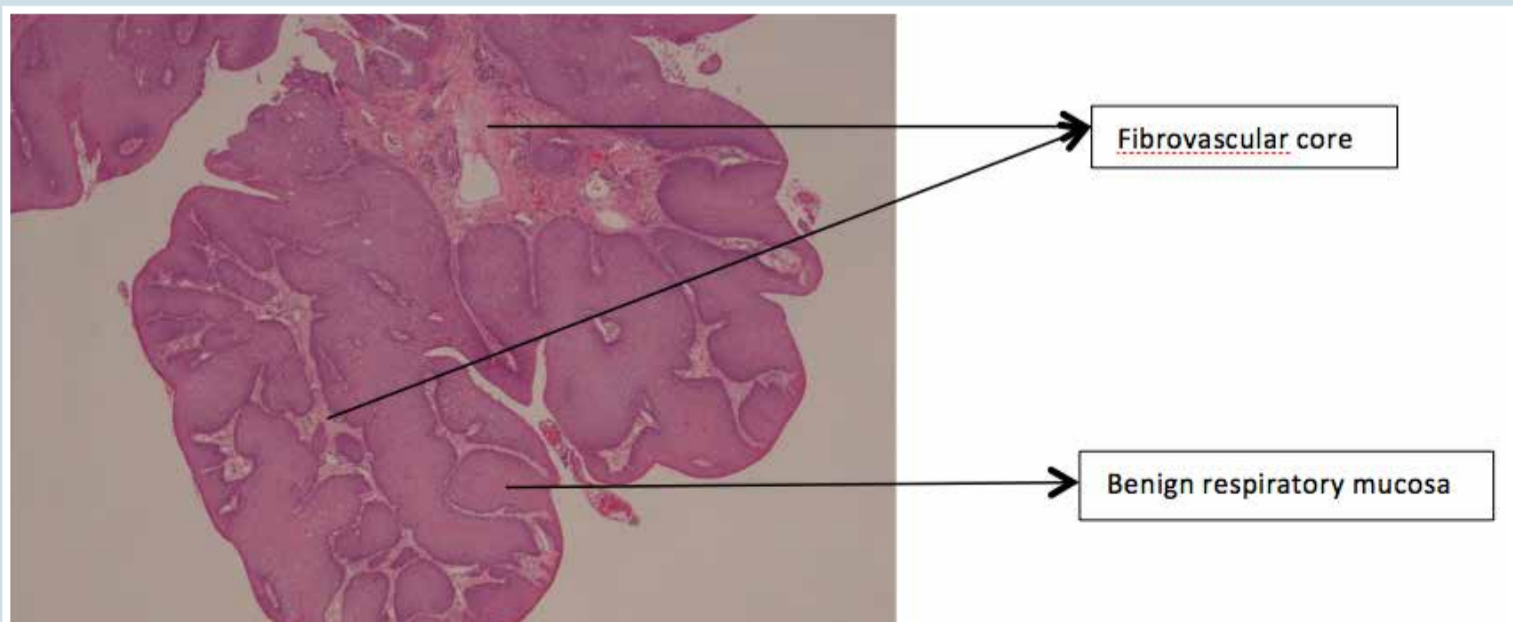
natal<sup>10</sup> and in early childhood period are benign<sup>7,9</sup> and in the adult when present are malignant.<sup>1</sup> These can be solid or cystic and sometimes calcified.<sup>1</sup> Pleomorphic adenoma are very rare tumours in the nasal vestibule and when present misdiagnosed half of the cases.<sup>3,8</sup> Granular cell tumour arising from Kieselbach's plexus of the nasal sep-

tum are extremely rare has origin from blood vessels and behave like hamangiomas, surgical excision or Co2 laser excision is the choice of treatment.<sup>2</sup> Atypical primary meningioma in the nasal septum with malignant transformation and distant metastasis also are reported in the literature.<sup>11</sup> Chondrosarcoma of the nasal septum are extremely rare



**Key Point**

*Nasal vestibular mass is a rare cause for nasal obstruction. Those mass can be benign or malignant, solid or cystic. Surgical excision or Co2 laser excision is the choice of treatment.*



**Figure 6:** Histopathology of Villous papilloma in lower magnification

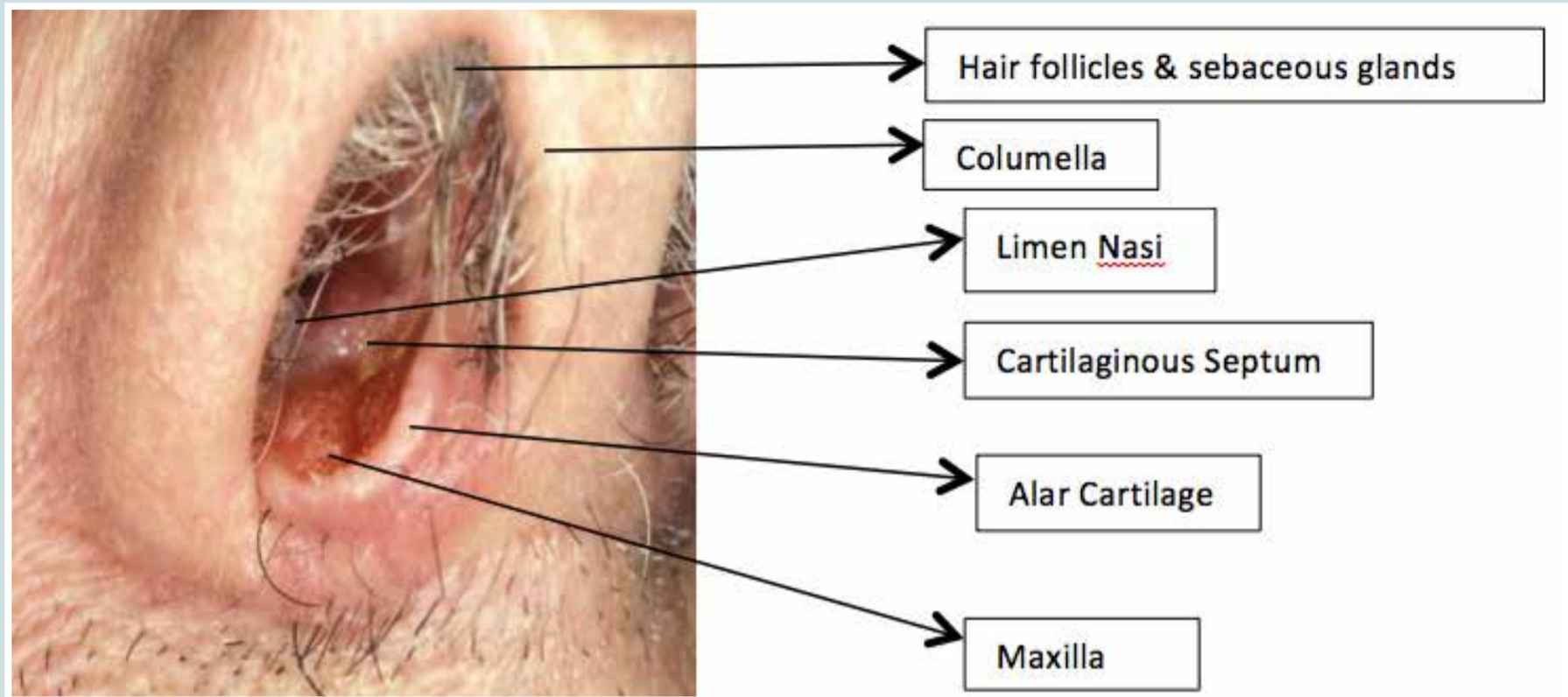


Figure 7: Anatomy of right nasal vestibule

tumour some times can present with vestibular mass.<sup>12</sup> Inflammatory myofibroblastic tumour of nasal septum,<sup>4</sup> Juvenile angiofibroma unusual location in the nasal vestibule,<sup>13</sup> trichoepithelioma of adnexa of skin of the nasal vestibule are extremely rare reported as vestibular mass. Long standing history of cocaine inhalation some times could cause a

fibrous tumour of nasal septum<sup>6</sup> and could present as vestibular mass with nasal obstruction.

If the tumour is large as in our case, anterior rhinoscopy approach is impossible. Lower lateral rhinotomy approach is needed to get complete exposure and access of the tumour. We have used 0 and 30 degree 4mm Naso-endoscope to get clearance of tumour in toto.



## SUMMARY OF KEY POINTS

The nasal vestibule is the pear shaped entrance to the nasal cavity. It is lined by skin in which there are numerous hair follicles and sebaceous glands.

Nasal vestibular mass is a rare cause for nasal obstruction. Those mass can be benign or malignant, solid or cystic.

Surgical excision or Co2 laser excision is the choice of treatment.

Lateral rhinotomy is described approach. Here we have used 4mm endoscope 0 and 30 degree to remove the tumour completely.



## CLINICAL PEARLS

Nasal vestibular mass are rare tumour causing nasal obstruction and epistaxis should be diagnosed early and removed in total using lateral rhinotomy approach or 4mm 0 and 30 degree endoscope.



### Post-test CME Quiz

*Members of the College of Family Physicians of Canada may claim MAINPRO-M2 Credits for this unaccredited educational program.*



#### Key Point

*Lateral rhinotomy is described approach. Here we have used 4mm endoscope 0 and 30 degree to remove the tumour completely.*

### References

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*Dr. Pradeep Shenoy takes full responsibility for the integrity of the content of paper.  
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