



## NASAL INVERTED PAPILLOMA OF UNUSUAL ORIGIN

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### Abstract:

Two cases of Schneiderian papilloma of the nasal septum are presented. The condition is rare, as indicated by a review of previously published cases. The clinical course of the lesion suggests that it behaves like Schneiderian papillomas elsewhere in the nasal cavity and paranasal sinuses. The need for aggressive surgical management and careful follow-up is emphasized.

**Key words:** Nasal septum -Schneiderian Papillomas

## Introduction:

Schneiderian papillomas are uncommon benign neoplasm's that originate from the mucosa of the nasal cavity and Paranasal sinuses. These lesions are currently designated as the inverted papilloma of the lateral nasal wall and Paranasal sinuses which is called lateral papilloma and the exophytic papilloma, mainly occurring on the nasal septum called septal papilloma [1].

Inverted papillomas of the septum are extremely rare in clinical practice. Dickerman reported the first case in 1896 since then less than 140 cases have been described in the world literature [2]. Kelly et al. demonstrated in 1999 that septal papillomas behave like lateral papillomas and require wide surgical excision and careful follow-up [1]. The followings are a case series of a rare schniederian papilloma inverted type arising from the nasal septum with different presentations.

### **Case 1:**

B.B.S is a 55 year old Punjabi male who presented to the ENT clinic with history of right recurrent epistaxis for six months duration, small in amount and stop spontaneously. Occurs two to three times per week and is not induced by trauma or change in weather.

There was history of gradual onset of right nasal blockage, progressively worsening over six month's period. It was not associated with facial swelling, numbness, pain, eye symptoms and ear or throat symptoms.

He has no known medical illness, no bleeding disorders, no family history of such complains. On examination, intra nasal endoscopic examination revealed a red-grey mass arising from the right nasal septum just anterior to the middle turbinate. It was firm in consistency on probing and it bleeds on touch. Other ENT and general examinations were unremarkable.

Computed tomography of the paranasal sinuses showed a non contrasted soft tissue mass occupying the right nasal cavity arising from the septum and abutting the middle turbinate. Other paranasal sinuses and posterior nasal space were normal. There was no evidence of bony erosions or calcifications. (Fig.1)

A biopsy was taken from the mass and the histopathological examination revealed polypoidal growth lined by stratified squamus epithelium with deep in growing stroma. The findings were consistent with Schneiderian papilomatosis inverted type.

The patient under went endoscopic sinus surgery in which wide excision of the mass from the anterior septum was performed. Post operative recovery was uneventful and subsequent regular follow up visits for the past 3 years showed no evidence of recurrence.

### Case 2:

J.J is a 44 year old Malay lady presented to our ENT clinic with history of progressive left nasal blockage for few months associated with post nasal drip, occasional clear rhinorrhea and hyposmia. There was no history of facial pain, facial fullness, epistaxis, eye symptoms or loosening of the teeth.

Nasal endoscopic examination revealed a smooth reddish mass occupying the floor of the left nasal cavity posteriorly at the level of the inferior turbinate arising from the septum. It was firm in consistency on probing, not friable and did not bleed on touch. (Fig 2) Other ENT examinations were unremarkable. An endoscopic wide local excisional biopsy was performed under local anesthesia. Histopathological examination revealed multiple foci of invaginations of the hyperplastic epithelium in to the underlying stroma. There was no evidence of oncocytic or squamous metaplasia. The finding was consistent with inverted papiloma. For the past four years she was followed up in our ENT clinic with no evidence of recurrence.

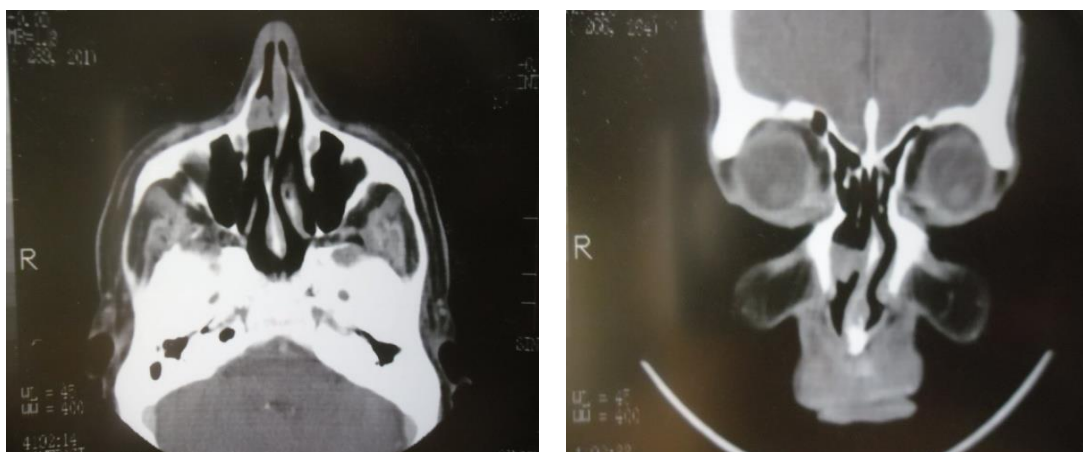


Figure 1: CT axial section (Right) coronal section (left) at the level of maxillary sinus showing a homogenous mass arising from the right anterior part of the nasal septum.

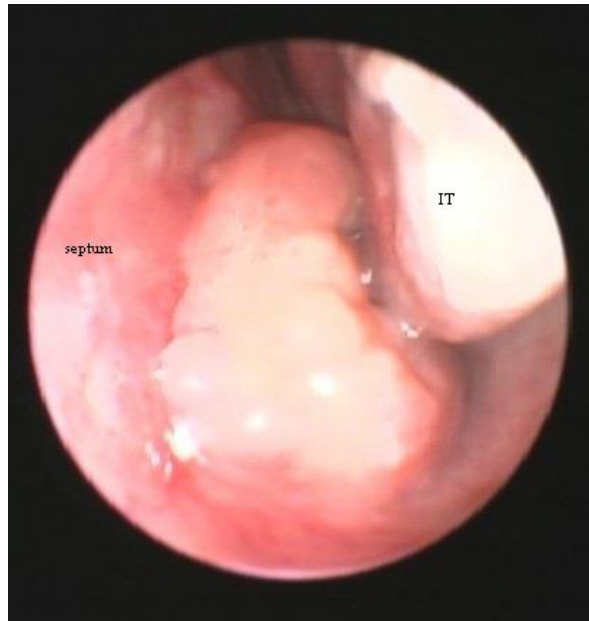


Figure.2 Endoscopic view of the nasal cavity showing a smooth surface mass arise from the left posterior septum at the level of inferior turbinate.

## Discussion

Inverted papilloma is a benign epithelial neoplasm of the mucous membrane of the nasal cavity and paranasal sinuses. It is a rare tumor occurring in approximately 0.5% of the nasal tumors, thus representing approximately 4% of all nasal polyps [3].

The etiology of this tumor is unknown. Possible theories include proliferation of nasal polyp, allergy, chronic inflammation, environmental carcinogens, and viral infection mainly and recently human papilloma virus (HPV) type 11. In Weber's study, all recurrent inverted papilloma were HPV DNA positive. Inverted papillomas predominantly affect males in the sixth decade [4]. They usually arise from the lateral nasal wall and seldom involve the frontal or sphenoid sinuses [4]. The frequency of inverted Papiloma on the nasal septum is even less [5].

The presenting symptoms seen in our cases were similar with the findings of many authors who believed that the signs and symptoms of the disease

depend on the location and extent of the tumour. Common symptoms in this study were unilateral nasal obstruction, nasal discharge and epistaxis. The major clinical and therapeutic problems concerning the Schneiderian papillomas are related to the tendency for recurrences and their long term association with squamous cell carcinoma [3].

The recurrence rate of the lateral papilloma is claimed to vary between 28% and 74%, with an average rate of 44%. In contrast, the septal papilloma is less likely to recur after removal [6]. Some authors have explained the high recurrence rate based on the multicentric origins of these lesions [2]. The usual cause of recurrence is, however, incomplete surgical excision [6]. An association with squamous cell carcinoma has been well documented for lateral papillomas. A rare case of sinonasal hybrid tumour within an inverted papilloma of the lateral wall has been reported in the literature [7] but malignancy has not yet been described in septal papillomas in the English literatures [1, 5], which may be related to the extreme rarity of carcinomas of the septum per se. The presented cases illustrate both clinical and therapeutical problems occurring with septal Schneiderian papillomas. The incidence of recurrence is more frequent with lateral tumors; therefore the diagnosis of these tumors necessitates aggressive surgical removal. An endoscopic assisted craniofacial resection has been advocated for extensive nasal papilloma involving the dura [8]. Even though malignancy in association with septal papillomas has not yet been reported any biopsy specimens taken from papillary lesions of the septum must be carefully studied histologically and patients closely followed up [6]. Both of our cases showed no evidence of recurrence till date with minimal 3 years of regular follow up.

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