



INVERTED PAPILLOMA: A CASE REPORT

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ABSTRACT Inverted papilloma is a benign epithelial neoplasm of nasal cavity arising from Schneiderian epithelium of nose and paranasal sinuses. It accounts for 0.5% to 4% of all primary nasal tumours. (HPV), EBV is the primary causative agent. Metachronous malignancy occurs in 1% cases and synchronous malignancy in 15% cases. The most common malignant neoplasm associated with inverted papilloma is squamous cell carcinoma. Literature shows endoscopic approach has a lower recurrence rate. we report a case of inverted papilloma managed by endoscopic resection.

KEYWORDS : Inverted papilloma, HPV, endoscopic resection

INTRODUCTION

Inverted papilloma is a benign sino-nasal epithelial tumour that falls under the category of sino-nasal Schneiderian papilloma. Schneiderian papilloma is classified as inverted, oncocytic, or exophytic papilloma by the World Health Organization (WHO) in 2005. They exclusively arise from the lateral wall of nose or occasionally from maxillary sinus, grows rapidly filling the nasal cavity with firm red or grey masses. It differs from other benign sinonasal tumours in three ways: its tendency to recur after complete surgical removal, its locally aggressive and destructive nature, and its malignant transformation. 10%-15% of the cases of the nasal cavity and paranasal sinuses are associated with squamous cell carcinoma.

CASE REPORT

A 58 years old male patient presented to the ENT OPD with complaint of right-side nasal obstruction since 1 year. He also noticed a mass in the right nasal cavity associated with mucoid nasal discharge and postnasal discharge. Associated with denasal speech.

On examination of nose, a pinkish lobulated mass was seen coming out of the right nasal cavity. this mass was insensitive to touch, firm in consistency, minor bleeding was noticed on attempt at probing and the probe could pass on all sides except laterally.

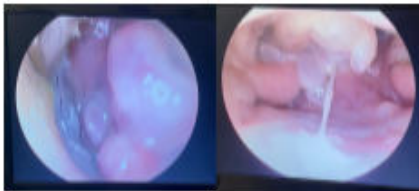


Fig 1

Diagnostic nasal endoscopy showed a pinkish polypoidal mass completely occupying the right nasal cavity till vestibule anteriorly, so endoscope could not be negotiated beyond it (Fig1). Left nasal cavity found to be free from lesions. On retrograde nasal endoscopy, a pinkish white polypoidal mass was seen in nasopharynx (Fig 1). Right maxillary and ethmoidal sinuses were tender. There was no cervical lymph-nodal enlargement on palpation.

Differential diagnosis in this case could be nasal polyp, allergic fungal rhinosinusitis, inverted papilloma and sino-nasal malignancy. Computed tomography of paranasal sinuses showed Heterogeneously enhancing soft tissue density lesion noted in the right maxillary sinus causing complete blockade of OMU extending anteriorly in to right nasal cavity and frontal sinuses, superiorly in to right ethmoid and supero-medially in to bilateral sphenoid sinuses and posteriorly in to nasopharynx. the lesion appears to be eroding the medial wall of

maxillary sinus and causing thinning of walls of ethmoid sinus, anterior wall of sphenoid sinus, nasal septum (Fig 2,3).

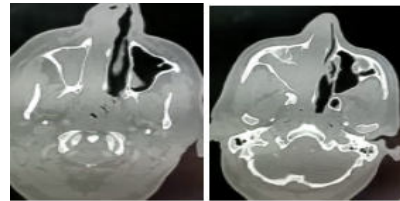


Fig 2 Soft tissue density noted in right maxillary sinuses, right nasal cavity and nasopharynx.

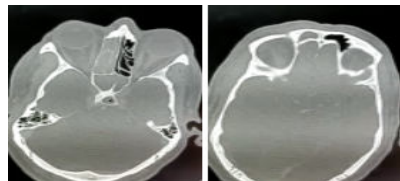


Fig 3 - Soft tissue density noted in right ethmoidal, frontal and sphenoid sinuses.

On Biopsy tissue bits lined by stratified squamous epithelium and focal areas of down growth of this epithelium as broad papillary fronds.

No evidence of any dysplasia/malignancy. The findings were suggestive of sino-nasal inverted papilloma (Fig 4)

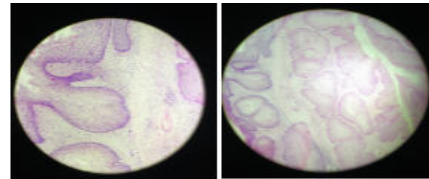


Fig 4 - tissue bits lined by stratified squamous epithelium and focal areas of down growth of this epithelium as broad papillary fronds.

The scan did not reveal the source of the lesion. As a result, it was decided to approach this lesion endoscopically in order to determine its origin.



Fig 5

Surgery performed under GA. Initial debulking of mass was done to get access to intranasal surgical landmarks, site of attachment of mass (Fig5) . Tumor pedicle was then identified and followed. The attachment appears to be from the area adjacent to the maxillary ostium. Uncinectomy and Bullectomy was performed. The ostium of the maxillary sinus was widened, and a mass from the sinus was removed. A mass from anterior ethmoidal cells and posterior ethmoidal air cells was cleared from the area around the frontal recess. The mass extends to the sphenoid area, but no infiltration into the sphenoid sinus is seen intraoperatively. After ensuring complete hemostasis, the nose was packed and the entire excised specimen was sent for histopathological analysis.

The histopathology of the excised specimen revealed strips of tissue lined by benign hyperplastic stratified epithelium. The epithelium grooving in to the underlying stroma as invaginating down growths and islands. The stroma also shows dense lympho-plasmocytic infiltration and surface epithelium infiltrated by neutrophils. The findings were suggestive of inflamed inverted papilloma. Post-operative period was uneventful. On the first follow-up visit after one week, a diagnostic nasal endoscopy revealed mucosal healing. Subsequent six-month follow-up visits revealed no evidence of tumour recurrence.

DISCUSSION

Inverted papilloma is a benign neoplasm of the sinonasal mucosa that is also known as Ringertz tumour, transitional cell papilloma, schneiderian cell papilloma, and epithelial papilloma. It is 4-5 times more common in males in their fifth and sixth decades of life. Though benign they are locally aggressive, have a tendency to recur and are associated with malignancy. The Schneiderian epithelium, is ectodermal derived. Papillomas arising from this membrane are very unusual in that they grow inwards. Schneiderian papillomas are typically unilateral; however, bilateral papillomas can occur. 2 Inverted papillomas are usually detected late, 1-4 years after the onset of sinonasal symptoms. CT and MRI scans were used for radiological evaluation. For follow-up cases, MRI is the first imaging modality used. 3 The preferred treatment method is complete surgical excision, including the adjacent uninvolved mucosa. Endonasal endoscopic approaches are only used for tumours with limited extension, whereas external or combined external/endoscopic approaches are the treatment of choice for the vast majority of lesions. 1 Tumor recurrence usually happens within the first two years, but it can happen after six years in some cases, so patients should be followed for at least six years. 2

CONCLUSION

It is a rare tumour that accounts for 0.5-4% of all primary nasal tumours. 4 with incidence of papilloma 0.6 cases/1,00,000 people /year. Papilloma incidence is 0.6 cases per 100,000 people per year. It is extremely rare for the paranasal sinuses to be the primary site of involvement, occurring in only 5% of cases. 5 If a patient in their fifth or sixth decade has a history of unilateral nasal obstruction, nasal discharge, or epistaxis, inverted papilloma should be suspected. Prior to making a proper diagnosis, a clinical, endoscopic, imaging, and histopathological examination of a suspected nasal mass should be performed. Inverted papilloma is a locally aggressive tumour that has a proclivity to recur if incomplete excision is performed. Hence, the tumour must be completely resected using the best surgical approach possible.

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