



CASE REPORT A GAIANT SINONASAL INVERTED PAPILOMA

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ABSTRACT Sinonasal inverted papillomas (SNIP) are benign tumours arising from Schneiderian mucosa of the nasal cavity and paranasal sinuses with either single or multifocal sites of origin. **Case study:** A 50 year old male presented with c/o left nasal obstruction for past 20 days and difficulty in breathing. General physical examination revealed stable vitals and no significant abnormalities. On anterior rhinoscopy, pale pinkish, polypoidal growth noted filling in left nasal cavity and vestibule. On diagnostic nasal endoscopy, smooth, pale pinkish, lobulated, polypoidal growth noted filling vestibule, middle meatus and nasopharynx. Intraoperatively, endoscopic sinus surgery with medial maxillectomy was done and tissue sent for histopathological examination. Regular patient follow up was done.

KEYWORDS : Sinonasal inverted Papilloma, Nasal Obstruction, Diagnostic nasal endoscopy

INTRODUCTION:

The first report of this type of tumor in the nasal cavity was made by Ward et al. in 1854. Sinonasal inverted papillomas (SNIP) are benign tumours arising from Schneiderian mucosa of the nasal cavity and paranasal sinuses with either single or multifocal sites of origin. A rare sinonasal tumor known as an inverted papilloma typically manifests itself in adults during the fifth decade of their lives.² In comparison to other sinonasal tumors, Tumor is distinguished by three distinct characteristics inverted, exophytic, and oncocyctic lesions. A high rate of recurrence, a relatively high potential for local destruction, and the possibility of carcinomatous progression are all characteristics of this case. The clinical picture presents nonspecific signs and symptoms, such as unilateral nasal obstruction, anosmia and headache.³

Signs and symptoms are unspecific and may cause unilateral nasal obstruction, epistaxis, olfactory disorders and recurrent rhinosinusitis. Diagnosis is carried out by history taking, otorhinolaryngological exam and image exam. CT scan (CT) and magnetic resonance image (MRI), of the nasal cavities and paranasal sinuses are important to assess the size, extension and anatomical relations of the tumor, and they also help differentiate them from other nasosinusal diseases and also in cases of orbital and/or intracranial complications. The main differential diagnoses are antrochoanal polyps, nasal cavity squamous polyp, fibrous dysplasia, gigantic cells granuloma and other neoplasia. Treatment is surgical. Surgical techniques and access must be broadly studied and individualized.⁴

Here we report a case of 50 yr old male patient presenting with nasal obstruction and difficulty in breathing.

Case Report:

A 50 year old male presented to the ENT outpatient Department of P.E.S Institute of Medical Sciences and Research Centre, Kuppam came with complaints of left nasal obstruction for past 20 days and difficulty in breathing. He did not complain of epistaxis, headache or visual impairment.

General physical examination revealed stable vitals and no significant abnormalities. On anterior rhinoscopy, pale pinkish, polypoidal growth noted filling in left nasal cavity and vestibule. On diagnostic nasal endoscopy, smooth, pale pinkish, lobulated, polypoidal growth noted filling vestibule, middle meatus and nasopharynx. On CT-PNS, soft tissue density lesion filling the nasal cavity and extending to the medial part of left maxillary sinus and nasopharynx with bony remodelling and thinning-?inverted papilloma. Sinusitis involving left frontal, bilateral maxillary and ethmoid sinuses. Intraoperatively, endoscopic surgical resection done (medial maxillectomy) and mass sent for histopathological evaluation.

On histopathological examination-sub epithelium shows prominent downward growth of epithelial nests, edema, mixed inflammatory cell infiltrate composed of lymphocytes, eosinophils. Features are suggestive of inverted sinonasal papilloma.

Post-operative evolution was satisfactory. Control was carried out every two months in the first 6 months after surgery through nasal endoscopic exam that showed a re-epithelized nasal cavity with no signs of disease recurrence

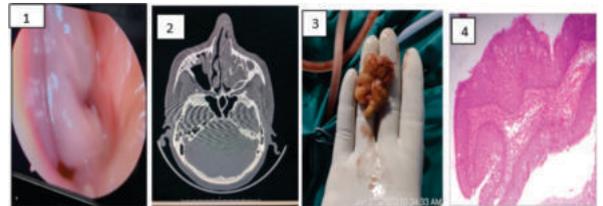


Fig no 1: Diagnostic Nasal Endoscopy Left nasal cavity shows smooth, pale pinkish, lobulated, polypoidal growth noted filling vestibule, middle meatus and nasopharynx.

Fig no 2: CT-PNS Left nasal cavity shows soft tissue density lesion filling the nasal cavity and extending to the medial part of left maxillary sinus and nasopharynx with bony remodelling and thinning.

Fig no 3: Endoscopic surgical resection done (medial maxillectomy) and mass sent for histopathological evaluation.

Fig no.4: Histopathological examination-sub epithelium shows prominent downward growth of epithelial nests, edema, mixed inflammatory cell infiltrate composed of lymphocytes, eosinophils.

DISCUSSION:

Inverted papilloma (synonym: Ringertz tumor, transitional cell papilloma, fungiform papilloma, cylindrical cell papilloma, schneiderian cell papilloma, epithelial papilloma, papillary sinusitis, soft papilloma and sinonasal-type papillomas) can be defined as a group of benign neoplasm arising from the sinonasal (Schneiderian) mucosa and is composed of squamous or columnar epithelial proliferation with associated mucous cells. The ectoderally derived lining of the sinonasal tract, termed as the schneiderian membrane, may give rise to three morphologically distinct benign papillomas (Schneiderian papillomas).⁶

The pathogenesis of inverted papilloma is still a matter of debate; there are several hypotheses that suggest that viral infections, such as human papillomavirus (HPV) or Epstein-Barr virus, smoking, allergies, or chronic local inflammation could be implicated in the development of the tumor.⁷

Males comprise the majority of those affected, and those between the ages of 40 and 70 are the ones who are most frequently affected. It is well known for its local invasiveness, despite the fact that it is benign.⁸

Between the fifth and sixth decades of life, the incidence of IPs is four to five times higher in men, with a higher frequency in Caucasians.⁹

The signs and symptoms are not specific, and they may include

epistaxis, olfactory abnormalities, recurrent rhinosinusitis, and unilateral nasal blockage.

The first step in the diagnostic process is to conduct a comprehensive otorhinolaryngological examination, as well as a detailed anamnesis, which includes an investigation into environmental exposure, harmful behaviors, allergies, and diseases connected with them.¹⁰ When it comes to the study and diagnosis of tumors, endoscopic and radiographic examinations (such as CT and MRI) are essential.¹¹ However, in order to rule out the presence of a vascularized tumor (juvenile nasoangiofibroma) or lesions that extend to the central nervous system (meningocele and meningoencephalocele), a biopsy must be performed in conjunction with histopathology in order to establish the diagnosis. However, the biopsy must not be performed before the histopathology examination.

The treatment consists of surgical procedures. When it comes to inverted papilloma, the endoscopic technique is considered the gold standard.

The recurrence of a tumor typically occurs within the first two years after treatment; however, in 17% of cases, it occurs later than six years after the initial treatment. The patient should be followed up for at least six years.^{12,13}

CONCLUSION

Inverted papillomas make up only 0.5–4% of primary nasal tumors, however they can be suspected if a male patient in their fifth or sixth decade has a mass in the nasal cavity that appears to be emerging from the lateral nasal wall and involves at least one paranasal sinus. Unilateral nasal obstruction, epistaxis, and sinusitis with discharge are common. Despite curative surgery, 40-80% recurrence rates were unacceptable. In most cases, "recurrence" refers to residual disease, making it difficult for clinicians to determine appropriate treatment. Open procedures like lateral rhinotomy and midfacial degloving enhance tumor visualization and reduce recurrence rates, including maxillectomy.

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