RECURRENT SQUAMOUS PAPILLOMA NASAL CAVITY WITH ORBITAL EXTENSION – A CASE REPORT

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ABSTRACT: Inverted papillomas of nasal cavity are known to recur. They arise from the lateral wall of nose. The incidence of malignancy is around 10%. Squamous papillomas are also known as fungiform papillomas. Fungiform papillomas generally occur on the nasal septum and are unlikely to undergo malignant change. Our case was a squamous papilloma with intraorbital extension. Extension was studied on CT scan. The mass was excised completely by medial maxillectomy through lateral rhinotomy approach and endoscopic assistance.

KEYWORDS: Squamous papilloma, Medial maxillectomy, Nasal endoscopy.

INTRODUCTION: Neoplasms arising in nasal cavity and paranasal sinuses account for 0.2% to 0.8% of all carcinomas.^[1] Almost half of nasal tumors arise from the lateral wall of the nose.^[1] Malignant tumors of the nasal cavity tend to involve neighboring structures such as orbit, brain, nasopharynx with bone erosion. We present a case of benign tumor of the nasal cavity – squamous papilloma (fungiform papilloma) involving the orbit.

CASE REPORT: 50 year old male admitted on 28.06.2008 with complaints of right sided nasal obstruction of 15 years duration, protrusion, watery discharge and diminished vision right eye of one year duration. Symptoms were of insidious onset, progressive in nature. Other complaints included partial left sided nasal obstruction, watery nasal discharge and anosmia of one year duration. Individual was operated twice in the past at other hospitals as follows.

- 1996 Transnasal route: Histopathology not known; recurrence in year 2000.
- 2001 Transnasal route: Histopathology suggested inverted papilloma.
- 2007 Recurrence.
- 2008 May, biopsy at another hospital suggested inverted papilloma.

No history of nasal bleeding, excessive sneezing, foul smelling nasal discharge, loose teeth, facial pain, loss of weight or appetite, bathing in public ponds.

General and systemic examination revealed no abnormality. Examination of face showed a mild facial asymmetry with bulge over right infra orbital region, widening of right nasofacial groove, right eye pushed outward, downward and laterally. Nose examination showed widening of the nasal dorsum and ala on right side (Figure 3). Nasal airway completely obstructed on right side with partial obstruction, on left side. Anterior rhinoscopy revealed pinkish fleshy mass occupying the whole of right nasal cavity. A probe could be passed around the mass except laterally and posteriorly. The mass did not bleed on touch and was insensitive to touch and pain. Posterior rhinoscopy showed a fleshy mass occupying the right choana fully and the left choana

partially. Paranasal sinus examination showed a bulge of the right infra orbital region with tenderness. Other ENT examination revealed no abnormality.

Right eye examination revealed severe proptosis, visual acuity, finger counting at 2 metres, normal pupillary reflex, restricted eyeball movements and compressive optic neuropathy. Left eye was within normal limits.

Routine investigations revealed no abnormality. CT scan of the paranasal sinuses (Figure 1) revealed a mass occupying the right nasal cavity extending to the right maxilla eroding the medial wall of the maxilla. The mass was extending to right orbit through lamina papyracea. The right optic nerve was pushed laterally and the mass was extending to left nasal cavity through nasal septum posteriorly. Clinically he was diagnosed to be a case of recurrent inverted papilloma right nasal cavity with possibility of malignant change.

Patient underwent surgery under GA on 07th July, 2008. Approach was by right lateral rhinotomy. Right medial maxillectomy with ethmoidectomy was done. Endoscopic assisted excision of mass was done from right orbit, and both nasal cavities. Tumor was seen extending into right orbit but not invading the periosteum. Medial canthotomy was used to approach the orbit medially. After excision of the mass, proptosis did not settle down. Hence orbital decompression was done with a horizontal incision of the periosteum at lamina papyracea area. Sero sanguinous fluid was drained from the retroorbital space and proptosis settled. Haemostasis was achieved with nasal packs. Post operatively he was given antibiotics and anti-inflammatory drugs for seven days. Post operatively the proptosis regressed, vision right eye recovered to 6/18 and nasal obstruction was cleared completely.

Histopathology of the mass surprisingly revealed it to be squamous (Fungiform), papilloma nasal cavity (Figure 2). The dichotomy in the previous histopathology reports and our reports was a dilemma for us.

DISCUSSION: Tumors of the nose and paranasal sinuses have been classified as benign (Everted papilloma, osteoma, etc), intermediate (Inverted papilloma, cylindric cell papilloma, etc), malignant (Basal cell carcinoma, squamous carcinoma, etc).^[1] The terminology squamous papilloma has been restricted to lesions of the nasal vestibule in the literature, whereas the terminologies fungiform, inverted and cylindrical cell papillomas have been used to describe papillomas of the mucosa of nasal cavity and paranasal sinuses. In our case we have used the terminology squamous papilloma / fungiform papilloma to describe the lesion arising from the mucosal surface of the nasal cavity.

The epithelium of the inverted papilloma and fungiform papilloma is essentially of the squamous cell pattern, while that of the cylindrical cell papilloma is of the multilayered columnar epithelium.^[2] In inverted papilloma the neoplastic epithelium shows pattern of invasion towards the underlying stroma. Whereas in fungiform papilloma the neoplastic epithelium grows towards the surface.

Inverted papillomas have a tendency to recur.^[3] This may be due to the inadequate removal during surgeries.^[2] The incidence of malignancy is around 10%.^[4, 5] Fungiform papillomas generally occur on the nasal septum and unlikely to undergo malignant change.^[4, 5]

CASE REPORT

Our case was a fungiform papilloma arising from the lateral wall of the nasal cavity. Erosion of the lamina papyracea and medial wall of maxilla could be due to tumor or previous surgery. Lateral rhinotomy with medial maxillectomy has been the standard surgery for tumor exposure and excision.^[6] With increasing experience in endoscopic sinus surgery, there is now an acceptable recurrence rate for inverted papilloma.^[6] Recent advances of nasal endoscopes have helped in better clearance of the tumor in difficult areas like sphenoid sinus, orbit and better post-operative follow up. In our case, we have a dilemma of a different histo pathological pattern from the previous surgeries.

Our patient showed a histopathology of fungiform papilloma, considered not to be at increased risk of malignancy ^[5]. However, his clinical profile indicated a diagnosis of inverted papilloma. Patient is on long term follow up for any recurrence or malignancy.

From our experience we suggest a team approach with ophthalmologist, use of nasal endoscopes for surgery and follow up, lateral rhinotomy with medial maxillectomy for reccurences.



FIG. 1: CT Scan Nose & PNS



Fig. 2: Histopathology slide of the mass from nasal cavity H & E stain

CASE REPORT



FIG. 3: Pre-operative photograph



FIG. 3: Post-operative photograph

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