ORIGINAL RESEARCH PAPER

ENT

KEY WORDS: oncocytic papilloma/ schneiderian papilloma/ sinonasal papilloma

A CASE REPORT OF ONCOCYTIC PAPILLOMA MIMICKING SINONASAL POLYP

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ABSTRACT

Schneiderian papillomas are benign neoplasms that arise from respiratory epithelium(ciliated columnar), termedas schneiderian mucosa. The characteristics featuresare : tendency to recur,capacity for local destruction, and association with squamous cell carcinoma.They are classified into three variants inverting, fungiform, and oncocytic varieties.Of these three the inverting and fungiform varieties are the most common, amoung these two, the inverting variety has the highest rate of association with malignancy. The inverting and oncocytic varieties are classically arises from the lateral nasal wall with extension into the adjacent sinuses (usually maxillary or ethmoid) whereas the fungiform lesion arises from the nasal septum. Oncocytic Schneiderian papilloma, comprising approximately 3-5% of Schneiderian papillomas, occurs mostly in patients over 50 years of age.1 Treatment of all the three variants is primarily surgical, with rather aggressive surgery mandated in most cases. A 48yr female patient presented with left sided nasal obstruction and left nasal discharge for past 4 months. .CT PNS showed soft tissue density/mucosal thickening in left maxillary sinus extending into left nasal cavity with obliteration of osteomeatal complex. Patient was planned for endoscopic sinus surgery under GA. Polypoid growth is debrided with microdebrider from left nasal cavity, maxillary sinus, nasopharynx and wide middle meatal antrostomy done.Tissue was sent for histopathology.

INTRODUCTION

Schneiderian papillomas, is also known as sinonasal papillomas, are benign sinonasal tumors that arise from the respiratory epithelium (ciliated columnar)of the nasal cavity and paranasal sinuses. Schneiderian papillomas account for ~2.5% (range 0.4-4.7%) of sinonasal tumors . They are classified into inverting (most common, ~50-80%), fungiform /septal(~20-50%), and oncocytic (~5%) varieties.The inverting and fungiform varieties are the most common, of which the inverting variety has the highest rate of association with malignancy. These two types of Schneiderian papilloma carry a 5-15% risk of malignant transformation to carcinoma (most commonly squamous cell carcinoma, but other types have been described as well). The exophytic papilloma type has essentially no malignant potential. Because of the high rate of recurrence and the possibility of missing an associated carcinoma, meticulous removal of all adjacent mucosa of sinonasal passage with en-bloc resection of tumor is the preferred management by both external and internal approaches.External approach was usually used. However, with the advance of sinonasal endoscopic technology and surgical techniques, the endoscopic management of these lesions in quite lots of situations is now feasible.2

I. CASE REPORT

A 48yr female patient presented with left sided nasal obstruction and left nasal discharge for past 4 months.

Patient was apparently normal before then developed nasal obstruction on left side, insidious in onset, gradually progressive, with no diurnal or seasonal variations, associated with mucoid nasal discharge, insidious onset with no seasonal variations relieved with medication, also associated with postnasal drip and headache on left side.

A. CLINICAL EXAMINATION:

NOSE:

-skin and external osseocartilgenous framework- normal

-Vestibule- normal

-External nares- normal

Anterior rhinoscopy	Right	Left
Septum	Deviated nasal septum to right	
Floor	Normal	Polypoidal tissue with discharge
Lateral wall	Normal	Polypoidal tissue upto middle turbinate

- Posterior rhinoscopy -polypoid tissue completely obstructing choana, nasopharynx on left side with postnasal drip.
- PNS examination:

PNS	RIGHT	LEFT
Frontal	nontender	nontender
Ant ethmoidal	nontender	nontender
Maxillary	nontender	tenderness +

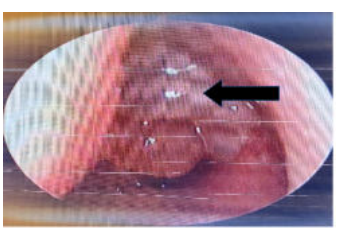
Functional test:

-smell :normalFunctional test Right Left Cold spatula test normal misting Cottonwool test normal movement of fibre

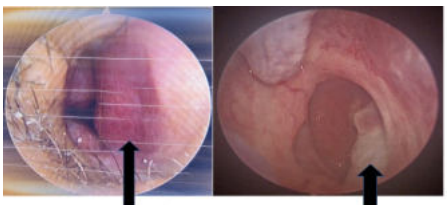
- Probe test: soft-firm consistency, did not bleed on touch, attatched to lateral wall.
- Oral cavity: normal
- EARS: normal
- EYES: normal
- HEAD and NECK Examination: normal

II. INVESTIGATIONS

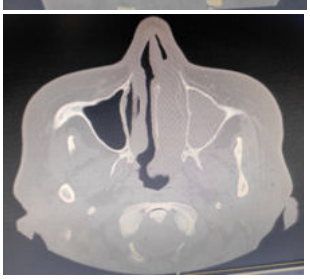
1. DIAGNOSTIC NASAL ENDOSCOPY: CLINICAL FINDINGS CONFIRMED



Left nasal cavity obstructed with growth



3.CT PNS:-SUBTLE DEVIATED NASAL SEPTUM TO RIGHT.
-SOFT TISSUE DENSITY/MUCOSAL THICKENING IN LEFT MAXILLARY SINUS EXTENDING INTO LEFT NASAL CAVITY WITH OBLITERATION OF OSTEOMEATAL COMPLEX S/O ANTROCHOANAL POLYP. BILATERAL CONCHA BULLOSA.



Impression :

Subtle DNS to right.

Soft tissue density/Mucosal thickening in left maxilalry sinus extending into left nasal cavity with obliteration of osteomeatal complex . s/o Antrochoanal polyp.

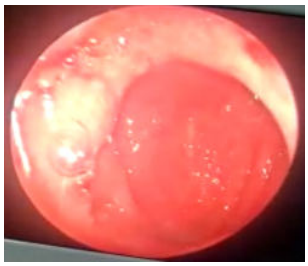
Bilateral concha bullosa.

4.HEMATOLGICAL INVESTIGATIONS: WITHIN NORMAL LIMITS

IV.TREATMENT

- planned for endoscopic sinus surgery under GA.
- INTRAOP: Polypoid growth is debrided with micro debrider from left nasal cavity, maxillary sinus, nasopharynx and wide middle meatal antrostomy done. There was profuse bleeding during surgical debridement.Tissue sent for histopathology.

POST FOLLOW UP:



- HPE: Gross - Grey brown polypoid mass measuring 2*2 cm

Microscopy –polypoidal tissue bits lined by Hyperplastic pseudostratified ciliated columnar epithelium with oncocytic change along wiyh focal neutrophilic micro abscesses,sub epithelium shows Fibrovascular stroma with necro inflammatory Infiltrate.
Impression: s/o Oncocytic papilloma.

Clinical details : Left sinonsal polyposis

Nature of specimen : ? Inverted papillae for HPE

Gross : Received a greybrown polypoid mass measuring 2 x 2 cm along with blood cl
(Partly embedded)

Sections for histology : A B

Microscopic Examination :

Sections studied show a polypoid tissue bits lined hyperplastic pseudostratified ciliated columnar epithelium with oncocytic change along with focal neutrophilic microabscesses, sub epithelium shows fibrovascular stroma with necroinflammatory infiltrate

IMPRESSION: FEATURES SUGGESTIVE OF ONCOCYTIC PAPILLOMA.

Correlate clinically.

III. DISCUSSION

Oncocytic papilloma is one of the rare benign neoplasm of nose and paranasal sinuses, primarily arising from the lateral nasal wall.

These papillomas arises from the ectodermally derived ciliated columnar respiratory epithelium, which is termed as schneiderian membrane

As this is one of the rare tumor,the clinical presentation is similar to other two variants of papillomas, only histopathology examination is helpful in diagnosis.

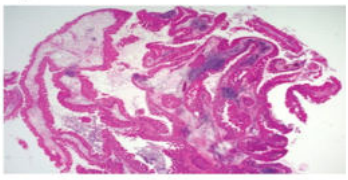
Oncocytic papilloma doesn't have sex predilection, this tumors most commonly occurs in fourth to fifth decade of life.

On histopathological examination- oncocytic papilloma shows exophytic or endophytic growth patterns with Hypertrophied respiratory epithelium, with abundant eosinophiic cytoplasm and mucin filled cyst and neutrophilic micro abscesses on the epithelium.

All the sinonasal malignancies are less common with incidence of 0.5 to 1/100000.25

Management is similar to that of inverted papilloma, where surgical excision of the tumor is done according to the extention.

ONCOCYTIC PAPILLOMA:



Low-power magnification, hematoxylin and eosin stain showing oncocytic Schneiderian papilloma exhibiting both exophytic and endophytic patterns with several layers of pseudostratified columnar (cylindrical) cells containing uniform small dark round nuclei and eosinophilic cytoplasm.

REFERENCES

1. Cunningham MJ, Brantley S, Barnes L, Schramm VL Jr. Oncocytic Schneiderian papilloma in a young adult: a rare diagnosis. Otolaryngol Head Neck Surg 1987
2. Tufano RP, Thaler ER. Endoscopic management of sinonasal inverted papilloma. Am J Rhinol 1999;13:423-6
3. Dulguerov P, Jacobsen MS, Allal AS, et al. Nasal and paranasal sinus carcinoma: are we making progress? A series of 220 patients and a systematic review. Cancer 2001;92(12):3012–29.