

CASE REPORT**FIBROEPITHELIAL POLYP: A RARE PRESENTATION IN SINONASAL CAVITY**

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A fibroepithelial polyp is a benign polypoidal lesion of mesodermal origin. It can present in any area of the body with an epithelial surface. These are relatively more common in skin and genitourinary tract and has been reported very rarely in head and neck region. We report here a rare presentation of fibroepithelial polyp in sinonasal cavity presenting with the symptoms of unilateral nasal obstruction. The patient underwent endoscopic surgical excision and recovered completely. In patients with unilateral sinonasal growing masses fibroepithelial polyp should be considered as one of the possible diagnoses. Sinonasal fibroepithelial polyps have good prognosis after being treated surgically.

Keywords: Fibroepithelial polyp; Sinonasal cavity; Nasal obstruction

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INTRODUCTION

Fibroepithelial polyps (FEPs) are benign tumours with mesothelial origin.¹ These are relatively common in skin and lower genitourinary tract. In head and neck region cases have been reported in literature of FEPs arising from external auditory canal, middle ear, nasal cavities, tonsils, hypopharynx, trachea and bronchus.¹⁻⁴ The prevalence of FEP is reported approximately up to 1.2% in literature with male predilection.⁵ Chronic inflammation, infections and traumatic factors have been suggested in the aetiology of FEP, but it can occur independently and therefore, the underlying pathology of the disease remains unclear.¹ We present here a rare presentation of FEP in sinonasal cavity presenting with the symptom of unilateral nasal obstruction.

CASE PRESENTATION

A 54 years old gentleman with known comorbid of hypertension, hypothyroidism and chronic kidney disease with history of renal transplant two years back presented to the outpatient department at our center with the complaint of right nasal obstruction for past eight months. Nasal obstruction was continuous and associated with right sided nasal discharge and facial heaviness.

Nasal endoscopic examination was done that showed polyps in right middle meatus that were extending into the posterior choana. The patient was investigated further by CT scan paranasal sinuses. CT scan showed a polypoidal soft tissue density material in the right ethmoid and right maxillary sinuses causing complete

opacification and widening of the osteomeatal complex on right side through which the polyps were extending into the nasal cavity. It also showed partial pneumatization of right frontal sinus (Figure-1).

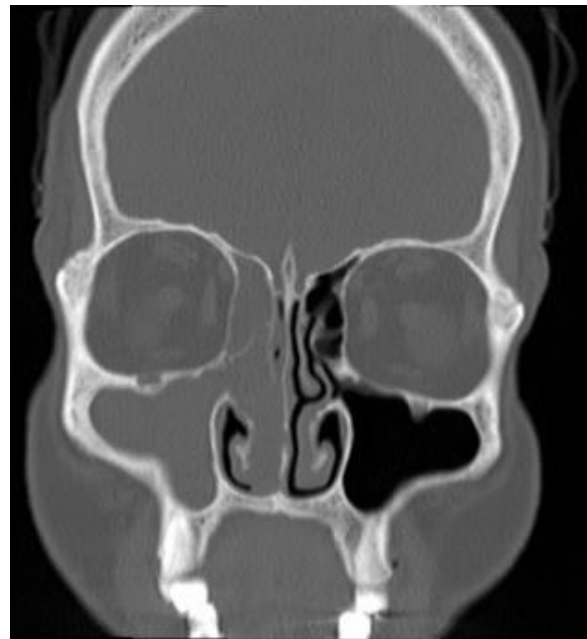


Figure-1: CT scan showing right ethmoidal and maxillary nasal polyps

The patient was planned for right endoscopic sinus surgery for removal of nasal polyps. Intraoperatively the polyps were removed and maxillary antrostomy was done. Anterior and posterior ethmoidal air cells were opened. Fungal

material as well as polyps were noted and removed, and the specimen was sent for histopathology and fungal culture. Postoperatively the patient remained stable and was discharged on oral antibiotics, pain killers and oral prednisolone for one week.

The fungal culture came out negative and the final histopathology revealed stratified squamous epithelium covered polypoidal tissue with underlying fibro-collagenous stroma and scattered inflammatory cells (Figure-2). These features were consistent with Fibroepithelial polyps. There was no evidence of malignancy.

The usual postoperative routine for endoscopic nasal surgery was followed. The patient was seen on 10th postoperative day. The symptom of nasal obstruction was relieved and there were no complications.

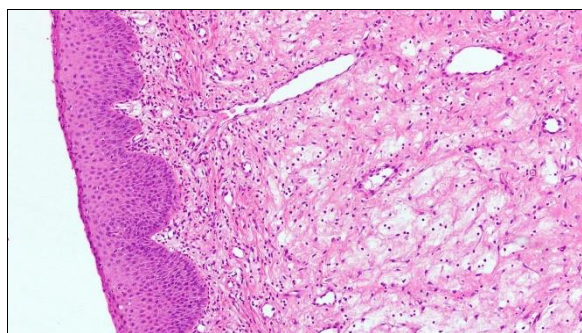


Figure 2: The squamous epithelium shows organized maturation and polarity. Underlying stroma is fibrous with edematous areas and scattered inflammatory cells. (H&E 10X)

DISCUSSION

Fibroepithelial polyps arising from nasal cavity and paranasal sinuses are extremely rare entities. To our knowledge there are only three reports in the literature of such FEPs arising from nasal floor, inferior turbinate and maxillary sinus.^{3,6} To our knowledge, we have presented the fourth case in this category so far reported throughout the world. The presenting symptoms of FEPs in head and neck region is related to their anatomic location such as nasal obstruction as in our case. Cases have been reported of FEPs in the upper airway presenting as impending airway and stridor and warranting emergency surgical excision.^{2,7} But usually, these present with symptoms of obstruction or with cosmetic issues in case of cutaneous lesions.

Many theories have been presented about the origin of FEPs ranging from secondary development from focal losses of elastic tissue to being a hamartoma of the lamina propria.⁷ But still the exact etiology remains unknown.⁸ FEPs are

benign lesions with a low incidence of malignant transformation especially for cutaneous lesions.⁸ Unlike the cutaneous lesions where clinical diagnosis is usually easy and accurate, head and neck FEPs are almost impossible to differentiate from malignant lesions just on the basis of clinical examination, therefore histopathological diagnosis by excisional biopsy is extremely important.⁸

Histologically, a FEP consists of fibrovascular stromal tissue covered by normal epithelium of the organ from which the FEP originated. Compared with papilloma, FEPs lack squamous epithelial overgrowth.⁹

Moreover, rare cases of FEPs transforming into squamous cell carcinomas have also been reported in literature thus supporting our recommendation of surgical excision of these lesions.¹⁰

We are sharing this case to emphasize the importance of histopathological diagnosis in case of polypoidal lesions of head and neck. The ENT surgeon should be conscious of all the possible diagnosis when dealing with such cases including the rare ones.

CONCLUSION

Fibroepithelial polyps in sinonasal cavity is an extremely rare condition which can mimic many malignant and benign neoplasms, making it a diagnosis of exclusion. Our case is the fourth case reported in literature.

Every tissue taken out from the nasal cavity should be sent for histopathological examination to avoid missing out important but rare diagnosis. Surgical excision of FEP of sinonasal cavity is the treatment of choice and should be performed to obtain diagnosis and avoid complications.

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