

## Choanal Polyp of Sphenoidal Origin with Bilateral Concha Bullosa: A Rare Case

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**Abstract :** Polyps arising from sphenoid sinus and extending into the nasopharynx are extremely rare and may be called as sphenchoanal polyp. A 19-years-old female presented to our OPD with complaints of, on and off cold since childhood, on and off right nasal cavity obstruction. On anterior rhinoscopic examination bilaterally polypoidal tissues were seen posteriorly in the nasopharynx. On posterior rhinoscopy bilobed polyp was seen over posterior choana. Axial and coronal computed scans (CT) of the nose and paranasal sinuses demonstrated well defined non enhancing polypoidal lesion involving right sphenoid and ethmoid sinuses and inferiorly extending up to nasopharynx with bilateral concha bullosa. Bilateral Concha Bullectomy with right sided Sphenoid Sinusotomy with removal of polyp was done. Patient came in OPD for monthly follow ups for one year post operatively with improvement in her symptoms. On every occasion diagnostic nasal endoscopy was done, no polyp was seen.

**Keywords:** Concha bullectomy, Concha bullosa, Polyps, Sphenchoanal polyp, Sphenoid sinusotomy.

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### I. Introduction

Polyps arising from a single sinus and extending into the nasopharynx mostly arise from the maxillary sinus and are known as antrochoanal polyp.

Polyps arising from sphenoid sinus and extending into the nasopharynx are extremely rare and may be called as sphenchoanal polyp. There are very few cases of sphenchoanal polyps reported earlier. Their aetiology remains unknown.

### II. Case Report

A 19-years-old female presented to our OPD with complaints of, on and off cold since childhood, on and off right nasal cavity obstruction for 8 years, on and off excessive sneezing and rhinorrhoea for 4 years and mouth breathing for 4 years. There was no other significant medical history. On anterior rhinoscopic examination bilaterally polypoidal tissues were seen posteriorly in the nasopharynx. On posterior rhinoscopy bilobed polyp was seen over posterior choana.

Nasal endoscopy revealed polypoidal tissues bilaterally near the posterior choana and in the first pass along the floor of nasal cavity on right side. The middle meatus was normal endoscopically on both sides.

Right ear examination revealed distortion of cone of light because of middle ear effusion. Axial and coronal computed scans (CT) of the nose and paranasal sinuses demonstrated well defined non enhancing polypoidal lesion involving right sphenoid and ethmoid sinuses (Fig.1, Fig.2) and inferiorly extending up to nasopharynx with bilateral concha bullosa.

### III. Procedure

The patient was posted for endoscopic sinus surgery under general anaesthesia. Bilateral Concha Bullectomy with right sided Sphenoid Sinusotomy with removal of polyp was done.

### IV. Result

Patient came to our OPD one week after operation and was examined. No residual polypoidal tissues were seen and she also reported improvement in her symptoms. Patient came in OPD for monthly follow ups for one year post operatively and on every occasion diagnostic nasal endoscopy was done, no polyp was seen.

### V. Discussion

One may scrutinise the region of the ostiomeatal complex and the sphenothmoidal recess on the computed tomographic images. An antrochoanal polyp exits through either a natural ostium, an accessory ostium or a surgically created defect. It then fills up the ostiomeatal complex en-route to the choana. A sphenchoanal polyp however exits through the sphenoid ostium, and passes through the sphenothmoidal recess

en-route to the choana. The management of sphenchoanal polyp is surgical. This involves the removal of both intranasal and intrasphenoidal components with best results.

**Figures**



**Fig.1.** CT Scan nose and paranasal sinuses, coronal view, showing polyp in sphenoid sinus (black arrow) on right side and in the nasopharynx (white arrow).



**Fig.2.** CT Scan nose and paranasal sinuses, axial view showing polyp in nasopharynx with normal both maxillary sinuses.



**Fig.3.** CT Scan nose and paranasal sinuses, coronal view showing bilateral Concha bullosa

## **VI. Conclusion**

Sphenchoanal polyp is a rare form of choanal polyp. Failure to recognise its existence may result in an erroneous diagnosis of antrochoanal polyp. This will lead to the performance of the wrong operation, unnecessary exploration of the maxillary sinus, and inadequate treatment of the sphenoid sinus. A risk of recurrence is associated with incomplete surgical excision.

## **References**

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