

## **ROLE OF AYURVEDA IN MANAGEMENT OF ISOLATED SPENOCHOANAL POLYP: A CASE REPORT**

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### ABSTRACT

Choanal polyps are solitary, benign masses which arise from one of the paranasal sinuses and through the corresponding drainage ostium project themselves to the choana, nasopharynx and sometimes up to oropharynx. Both antrochoanal and sphenchoanal polyps produce almost similar symptoms with indistinguishable clinical findings for the unsuspecting clinician. This paper serves to highlight the clinical scenario and Ayurvedic management method in case of sphenchoanal polyps.

**Keywords:** Sphenchoanal polyp, Isolated, *laxmivilasha rasa*, *sadbindutail nasya*.

### INTRODUCTION

Isolated polyps arising from any of the sinus and extending to the nasopharynx is called a choanal polyp. <sup>(1)</sup> Choanal polyps can be of three types based on their sinus of origin antrochoanal, ethmochoanal, sphenchoanal<sup>(2)</sup>. When an Isolated polyp arises from the sphenoid sinus and extends towards the posterior choana it is called as sphenchoanal polyp<sup>(3)</sup>. Usually antrochoanal polyps are more common than sphenchoanal polyp<sup>(4)</sup>. The sphenchoanal polyps have 3 parts, intrasinus-al, ostial, and the choanal part<sup>(5)</sup>. The exact etiology is still unknown, but is believed to be initiated by prolapsed sinus mucosa or due to

cyst placed in the sinus that grows gradually causing obstruction to the draining ostium<sup>(6)</sup>. As the presentation in antrochoanal and sphenchoanal polyps are similar a thorough examination, nasal endoscopy and radiological investigations are necessary to make a correct diagnosis and plan the appropriate surgical and conservative treatment.

### Case Report

A twenty one-year-old male presented to the ENT department with complaints of bilateral nasal obstruction and headache for six months. Nasal obstruction was continuous and progres-

sive in nature with occasional mucopurulent discharge. There was no associated history of sneezing, ear block or throat pain. On anterior rhinoscopic examination both the nasal cavities appeared normal without any evidence of mass or polyp inside. Examination of the throat was normal without any polyp being seen in the oropharynx. Posterior rhinoscopic examination revealed the presence of a smooth pale glistening mass filling the nasopharynx. Patient was taken for a diagnostic nasal endoscopy which revealed the presence of a polyp filling the posterior choana on both sides. Plain radiographs showed clear maxillary, frontal and ethmoid sinuses. Computed tomography of the sinuses revealed an opaque left sphenoid sinus which was continuous with that of the nasal opacities. There was no abnormality noted in the ethmoid, frontal and maxillary sinuses.

During surgery, the choanal polyp was removed under endoscopic guidance. The stalk of the polyp was traced to the left sphenoid ostium in the sphenoid-ethmoidal recess. The sphenoid ostium was enlarged in a medial and inferior direction.

The sphenoidal component of the polyp was then removed. Histopathology examination showed a benign sphenchoanal polyp with edematous stroma, respiratory type epithelial lining, thickened basement membrane, and a non-specific cellular infiltrate mixed with eosinophils. The patient made a good postoperative recovery. After two weeks patient was given *laxmivilasha rasa* 250 mg twice daily with ginger juice and honey, *Dasamula katuraya kasaya* 20ml with warm water twice dai-

ly, *Vyosadivati* 250 mg twice daily orally, followed by *sadbindutail nasya* two drops in each nostril in morning for one month. Six months later, on examination the sphenoid sinus revealed good re-epithelialisation with normal healthy mucosa. Patient did not show any signs of recurrence after one year of follow up.

## DISCUSSION

A choanal polyp is defined as an isolated solitary sinus mass or cyst which has passed through the sinus ostia and protruded into the boundary between the nasal cavity and nasopharynx, the choana.<sup>(7)</sup> Two well known forms are seen, the antrochoanal polyp which is more common and the rare sphenchoanal polyp<sup>(8)</sup>. Ethmoidochoanal polyps are extremely uncommon. Choanal polyps arising from the frontal sinus are also very rare<sup>(8)</sup>. It is not known exactly what causes choanal polyps, but IgE-mediated allergic reaction against allergens is thought to be a cause<sup>(9)</sup>. However, patients with nasal allergy are not predisposed to choanal polyp formation. Most patients do not have any rhinologic symptoms after surgical excision of the Choanal polyp. Testing with RAST for specific allergens and skin prick tests have shown that choanal polyp formation is unrelated to allergy. It is suggested that a precursor intramural cyst in the maxillary antrum or sphenoid sinus gives rise to choanal polyp.<sup>(10)</sup> Nearly 4% of the normal asymptomatic population exhibit the presence of benign intramural cyst.<sup>(10)</sup> These cysts have the tendency to gradually enlarge, and come out through the ostium, forming a choanal polyp.<sup>(11)</sup> The macro architectural and micro

architectural similarities between a choanal polyp and the common intramural cyst was demonstrated by Berg.<sup>(12)</sup> Cystic fluid aspirated from choanal polyps was found to have a similar concentration of proteins as in the common intramural cyst.<sup>(13)</sup> Choanal polyps may degenerate into angiomatous polyps occasionally, which are non-neoplastic lesions and can be managed like the choanal Polyps.<sup>(14)</sup> Choanal polyps when occurring in children, deserve special attention and must be differentiated from meningoencephaloceles and other nasopharyngeal masses.<sup>(14)</sup> Meningoencephaloceles or gliomas should be first ruled out in case of a choanal mass in a child instead of suspecting an antrochoanal or sphenoidal polyp.<sup>(15)</sup> Computed tomography or magnetic resonance imaging should be done ideally to rule out any dehiscence in the bony skull base. Sphenoidal polyps occur much less frequently and are therefore more likely to be missed in diagnosis, if care is not taken to find the site of origin of a choanal polyp. Choanal polyps may not arise from maxillary sinus all the time and adequate investigations should be done before leveling it an antrochoanal polyp.

There is evidence of cases where a sphenoidal polyp was mistaken as an antrochoanal polyp, resulting in unnecessary exploration of the maxillary sinus. These polyps have a rare chance of recurrence which can be prevented using various Ayurvedic medicines. The above disease is similar to *nasa-arsh* in Ayurveda and mentioned in *Susrut Samhita*, *Bhavprakash*, *Astrang Hriday* as a *granthi* like appearance, which occurs due to vitiation of

*Kapha* or *Kapha & Rakta*. The aim of the Ayurveda treatment is to remove vitiated *kapha* so that the recurrence of polyps can be prevented.

In this condition along with oral medicines *nasya karma* was given which is medicated oil or powders administered through nostrils to eliminate the toxins from head and neck. The medicines through nostrils reach head & then spread to eye, ear, and throat & stimulate the mucosal membrane of the nostrils thus removing the obstruction. It also stimulates the paranasal sinuses & removes vitiated *Kapha* thus reducing the chances of recurrence of the disease. Here in this case, we tried *sadbindu tail* as *Nasya* with oral administration of *Naradiya Lakshmvilas Rasa*, *Vyosadi vati*, *Dasamula katutraya kasaya*. *Sad bindu tail* when used for *Nasya* has anti-inflammatory & healing property. It also helps in controlling various types of nasal infections like chronic sinusitis & chronic rhinitis. Chronic rhinosinusitis is the main cause of development of polyps as these diseases lead to inflammation of nasal mucosa, & obstruction, forming nasal polyps in the last stage.

## CONCLUSION

Though sphenoidal polyps are rare as compared to antrochoanal polyp, a proper clinical examination, Nasal endoscopy and CT scan is mandatory to diagnose sphenoidal polyp. Failure to recognize its existence may result in an erroneous diagnosis of antrochoanal polyp. This will lead to unnecessary exploration of other sinuses, and inadequate removal of the sphenoidal polyp leading to recurrence at a later date. *Ayurveda* drugs like

*Naradiya laxmivilasha rasa, Dasamula katutraya kasaya, Vyosadivati and sadbindutail nasya* can be used prophylactically to reduce nasal mucosa inflammation and prevent recurrence of the polyp.

## REFERENCES

1. Spraggs PD. Radiological diagnosis of sphenoidal polyp. *J Laryngol Otol* 1993; 107:159-60.
2. Ryan RB Jr, Neel HB III. Antrochoanal polyps. *J Otolaryngol* 1979; 8:344-6.
3. Batsakis JG, Sneige N. Choanal and angiomatous polyps of the sinonasal tract. *Ann Otol Rhinol Laryngol* 1992; 101:623-5.
4. Larsen PL, Tos M. Origin of nasal polyps. *Laryngoscope* 1991; 101:305-12.
5. Crampette L, Mondain M, Rombaux P. Sphenoidal polyp in children. Diagnosis and treatment. *Rhinology*, 1995, 33:43-5.
6. Cook PR, Davis WB, McDonald R, McKinsey JP. Antrochoanal polyps: A review of 33 cases (see comments). *Ear Nose Throat J* 1993; 72:401-2, 404-10.
7. Berg O, Carenfelt C, Silfversward C, Sobin A. Origin of the antrochoanal polyp. *Arch Otolaryngol Head Neck Surg* 1988; 114:1270-1.
8. Som PM, Cohen BA, Sacher M, Choi I-S, Bryan NR. The angiomatous polyp and the angiofibroma: two different lesions. *Radiology* 1982; 144:329-34. 84:951-4.
9. Prasad U, Sagar PC, Shahul Hameed A N. Choanal polyp. *J Laryngol Otol* 1970; 84:951-4.
10. Sirola R. Choanal polyps. *Acta Otolaryngologica (Stockholm)* 1966, 61:42-8.
11. Jadavaji T, Narayana R, editors. *Sutrasthana*. Varanasi: Chaukhamba Surbharati Prakashana; 2008. *Sushruta Samhita Dalhana Comm. Nibandhasangraha*, Gayadasacharya comm. *Nyayachandrika Panjika on Nidanasthana*; p. 45.
12. Vidyasagar PS, editor. *Madhyakhanda*. 7th ed. Varanasi: Chaukhamba Orientalia; 2008. *Sharangadhara. Sharangdhar Samhita. Adhamalla's Dipika and Kasiram's, Gudhartha Dipika*; pp. 2-4.
13. Srikantha Murthy KR, editor. *Nasarogapratishtedha Adhyaya. Ashtanga Samgraha of Vagabhata*. Uttarsthana. 4<sup>th</sup> ed., Vol. 3, Ch. 24. Varanasi: Chaukhambha Orientalia; 2005. p. 212.
14. Shastri KA, editor. *Nasagataroga Vijnaniya Adhyaya. Shushrutasmhita of Maharishi Susruta edited with Ayurveda Tattva Sandipika, Uttarantra*. Vol. 2, Ch. 22. Varanasi: Chaukhamba Sanskrit Sansthan; Reprint 2014. p. 144.
15. Mishra S, editor. *Udardasheetapittakothadhikara. Bhaisjyarnavali of Kaviraj Govinda Das Sen*. Ch. 55. Varanasi: Chaukhamba Subharti Prakashan; 2011. p. 898

**Figure1:** Sphenoidal polyp seen on nasal endoscopy



**Figure 2:** CT Scan showing sphenoidal polyp



**Figure 3:** Polyp after



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