Case Report

Shrinkage and Non-recurrence of Ethmoidal Nasal Polyp with Ayurveda Management

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INTRODUCTION

Nasal blockage is the most common problem in ENT practice. The etiological factors of nasal obstruction are due to allergic rhinitis, sinusitis, deviated nasal septum and turbinate hypertrophy.¹ The other one of the main aetiology is nasal polyp which is responsible for the nasal blockage in common lifestyle nowadays. A nasal polyp is non-neoplastic masses of oedematous nasal or sinus mucosa. They are of two types of the bilateral ethmoidal polyp and antrochoanal polyp. They are arising in inflammatory conditions of the nasal mucosa (rhinosinusitis), disorders of ciliary motility and abnormal composition of the nasal mucosa. Multiple nasal polyps are bilateral, always arise from the lateral wall of the nose usually from middle meatus and its comes to the middle turbinate and grows toward the anterior aspect of the nose. Antrochoanal polyp arises from the mucosa of maxillary antrum and it grows in the choana and nasal cavity. The medical management is various antihistaminics to control allergy and reduce the oedematous mucosa. A short course of steroids, decongestants are conservative treatment, but they provide a symptomatic relief does not cure the disease. The surgical intervention is polypectomy, intranasal, extra nasal ethmoidectomy, endoscopic sinus surgery and micro-debride. None of these surgical techniques is reported to be effective and curative. Even after receiving long term medical treatment, the patient may have to undergo repeated surgery. But the recurrence is common and not has sustained benefit.²

As per ayurvedic classic describe Nasarsha as fleshy sprouts inside the nose (Mamsankura). The symptoms are difficulty in breathing, running nose, nasal voice, foul smell and head-ache.³ Considering this case as Nasarsha the treatment has been adapted. SwetaGunja (Abrusprecatorius) is seen frequently mentioned in the management of Arshas in the classical texts of Ayurveda.⁴ The present report aims the efficacy

ABSTRACT

Introduction: The current treatment modality for nasal polyposis is surgical intervention but the recurrence rate is high. This case report discusses the effective management with Ayurvedic treatment of a case diagnosed as an ethmoidal nasal polyp which was posted for FESS. There is a reduction in the size of the polyp, the patient is asymptomatic and recurrence-free for one year.

Case: A 35-year young man on steroidal nasal spray for a year was approached to our hospital with symptoms of continuous nasal blockage and loss of smell. The features were suggestive of nasal polyp ethmoidal type has been diagnostic by CT PNS.

Intervention: Application of the paste of SwetaGunja (Abrusprecatorius) over the polyp was started and surgery was deferred because the patient responded positively.

Results: The outcome of this case study reveals that Nasal endoscopy finding the size of the polyp reduced from grade 3 to 1 according to Lund Mackey scoring, the patient became asymptomatic and recovered the sense of smell. There was no recurrence of symptoms or polyp for 1 year.

Conclusion: Non-surgical intervention of polyp demonstrating the reduction the polyp size, symptoms and also recurrence-free for 1 year. But long studies are needed to assess the sustained results.

Key Words: Nasal polyp, Endoscopy, Ayurvedic intervention
of the application of SwetaGunja pastes in the management of Ethmoidal Nasal Polyp.

**CASE REPORT**

A 35-year young man presenting with complaints of continuous nasal blockage and loss of smell for a year.

**CLINICAL FINDINGS**

On local examination of the nose by inspection and palpation, the external nose was normal with broadening of anterior nares. On anterior rhinoscopy examination smooth, glistening polypoidal mass appear in both sides of the nasal cavity at the level of the inferior turbinate (Figure 1). The mucosa membrane was appearing pale in colour. Probing test was done to differentiate the ethmoidal polyp from turbinate hypertrophy. Routine haematological investigation was done in that absolute eosinophilic count were above the normal range. The haemoglobin, total count, differential count and erythrocyte sedimentation rate were within normal limits. CT-PNS confirm the diagnosis of ethmoidal nasal polyp.

**HISTORY**

The patient underwent medical management with a variety of decongestants nasal spray, antihistamines and antibiotics for 1 year but did not get any relief. As the disease was not controllable with medical management, the patient was advised for functional endoscopic sinus surgery (FESS). The patient was not willing for surgery, and hence he switched to a contemporary line of management.

**Procedure administrated to the patient**

Poorva-Karma (pre-operative procedure)

Ayurvedic interventions were adapted to treat this patient. Patient was placed in a sitting position with the head extended by placing a pillow under the shoulders to expose the nasal cavity with the proper aseptic condition was followed.

Pradhana Karma (operative procedure)

Nasal cavity was exposed using Thudicum’s Nasal Speculum swetaganjalepam was applied over the nasal polyp of the exposed area, by using the spatula where the septum and lateral wall of the nose was covered by gauze piece. Applied swetaganjalepam was kept for 20 minutes (Figure 2). After some time, the swetaganjalepam was wiped out with cotton rolled by the probe. The same procedure is done on another side of the nasal cavity.

Paschat Karma (post-operative procedure)

The patient kept for observation for 30 minutes then was advised to avoid exposure to air or breeze, dust, smoke, wind and cold foods. The patient was advised to take light diet.

**FOLLOW UP**

Patients were advised to come on days 7, 15, 21, 28 for the repeat of procedure i.e. weekly once swetagunja application was done. This 1 month were considered as the duration of the treatment. Follow-up was done every 3 months for the next 1 year.

**RESULTS**

The patient complained of intermittent watery discharge on the next day which was self-controlled, in 2 days. It was observed that reduction in the size of an ethmoidal polyp during the follow-ups which was scored from 3 to 1 according to Lund Mackey scale (Figure 3). Nasal obstruction, sense of smell was improved and recurrence-free. Meanwhile, he has prescribed nasal drops with Trikatuthaila 4 drops in each nostril with stream inhalation necessarily.

**DISCUSSION**

Nasal cavities provide conduction, filtration, heating, humidification and chemosensation of air which is mainly performed through the nasal mucosa. Hence, nasal obstruction by polyp causes significant difficulty affecting the daily activities of the patients. Nasal mucosa in middle meatus and turbinate become oedematous due to extracellular fluid collection causing polypoidal change. Acharya Vagabhata describe Nasarsha as fleshy sprouts inside the nose (mamsankura). Surgery, alkaline cautery, thermal cautery and medications have been recommended as a treatment. Sweta Gunja (Abrusprecatorius) is seen frequently mentioned in the management of Arshas in the classical texts of Ayurveda. The pharmacological properties of SwetaGunja as described in the Ayurvedic texts like Pungent taste, Hot potency and Drying nature indicate its ability to clear the nasal blockage, headache and also to cause shrinkage of the polyp leading to its reduction. It has also been observed in clinical practice that application of a paste of swetagunja shrinkage and detachment of the polyp from its pedicle (Figure 4). Abrusprecatorious have anti-inflammatory property, which reduces the inflammation of the nasal mucosa and anti-microbial property helps to reduce the risk of secondary infection due to stasis of secretions in the sinuses (Figure 5).
CONCLUSION

There are different methods of using Swetagunja. One of them is lepam can be a better non-invasive option for the treatment of ethmoidal nasal polyposis and is being practised widely. Cost-effective, easily administered and curative. On this principle, large sample studies should be conducted to validate the management of this condition.

PATIENT CONSENT

The patent has provided written consent and permits publication. This has been documented.

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Figure 1: Ethmoidal polyp (BT).

Figure 2: Sweta Gunja lepam.

Figure 3: Ethmoidal polyp (AT).

Figure 4: Detached polyp.

Figure 5: Sweta gunja seeds (Abrus Precatorius).