



EFFECT OF SHODHITA SWETHA GUNJA LEPA IN THE MANAGEMENT OF NASA ARSHAS -A CASE REPORT

Deeraj B C¹, Vigneshwaran K S², Preethi P³

¹Professor, Department of Shalakyia Tantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan, Karnataka, India.

²Post Graduate Scholar, Department of Shalakyia Tantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan, Karnataka, India.

ORCHID: <https://orcid.org/0009-0007-1221-2106>

³Post Graduate Scholar, Department of Shalakyia Tantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan, Karnataka, India.

ORCHID: <https://orcid.org/0009-0009-1287-3566>

Corresponding Author: Vigneshwaran K S

ABSTRACT

Nasarshas is a condition wherein there is a mass in nasal cavity which creates breathing difficulty, watery discharge, sneezing and loss of perception of smell. This condition can be correlated to Nasal polyps. In Ayurveda, this condition can be considered to have an involvement of Kapha Dosha. This case study showcases a successful treatment of Nasa Arshas. The approach involved understanding the underlying pathophysiology of the condition and developing a treatment plan using topical herbal applications. The outcome demonstrates the effectiveness of Ayurvedic management in addressing Nasa Arshas.

A 74-year-old-male reported to Shalakyia Tantra OPD, Sri Dharmasthala Manjunatheshwara College & Hospital, Hassan with complaints of severe nasal blockage, difficulty in breathing, sneezing, watery nasal discharge and loss of sense of smell since 4 to 5 years. The symptoms had aggravated in the past 6 months. Based on the history obtained, clinical features and clinical findings, the diagnosis of Nasa Arshas was made. The treatment plan involved the application of Gunja lepa, a topical herbal paste, directly onto the Nasal Polyp (Nasa Arshas). At the end of 10 days of treatment, patient experienced a marked reduction in breathing difficulty. Significant relief was also noted in associated symptoms like, watery nasal discharge, sneezing and loss of perception of smell. Hence, the treatment approach for Nasa Arshas was found to be effective.

KEY WORDS: Nasarshas, Nasavarodha, Kshavatu, Shodhita Sweta Gunja Lepa, Upavisha, Anubhuta, Nasal Polyp

INTRODUCTION

Nasarshas is a mass in the nasal cavity which looks like the tip of *Aja Sthana* (teat of goat breast). These are soft, non-cancerous growths in the nasal passages and sinuses, causing swelling, nasal obstruction, sneezing and breathing difficulty. Nasarshas should be treated like general Arshas which includes *Bheshaja*, *Shashtra*, *Kshara*, and *Agnikarma*.¹ Nasal polyps are non-neoplastic masses of oedematous nasal or sinus mucosa. The major aetiologies of nasal polyp are chronic rhinosinusitis (both allergic and non-allergic origin), aspirin intolerance, cystic fibrosis, allergic fungal sinusitis, asthma. In early stages surface of nasal polypi will be covered by ciliated columnar epithelium similar to nasal mucosa but later undergoes a metaplastic change to transitional and squamous type when exposed to constant atmospheric irritation.² Nasal mucosa, particularly in the region of middle meatus and turbinate, becomes edematous due to the collection of extracellular fluid causing polypoidal change. Polypi, which are sessile in the beginning become pedunculated due to gravity and excessive sneezing.³ Functional endoscopic sinus surgery is a preferred modality of treatment for nasal polyposis in contemporary science which may have various complications and significant recurrence rate.⁴

Gunja (*Abrus precatorius* Linn. Family *Fabaceae*) is one of the widely described *Upavisha* drugs.⁵ Ayurveda prescribes the use of its seed kernels only after they are subjected to the process of *Shodhana* either by *Go Dugdha* (cow's milk) or *Kanji* (sour gruel).⁶ Some of the important synonyms of *gunja* are *Shweta gunja*, *ratti*, *gungunji*, *durmooha*, *bahuveerya*.⁷ The plant occurs in three forms-white, red and black variety. The white variety was used for the present study.⁸ HPTLC studies revealed that the process of *shodhana* resulted in the depletion of more toxic alkaloid hypaphorine and protein abrin.⁹ *Gunja* has been attributed with *Kashaya rasa* (astringent in taste), *Tikshna* (penetrating), *laghu-ruksha* (light and dry in nature), *ushna veerya* (hot in potency) and *katu vipaka* (pungent after digestion). It pacifies *kapha* and *vata* dosha.⁷

The successful outcome, characterized by the non- recurrence of symptoms, indicates that this treatment modality is a viable and efficacious option for the management of *Nasa Arshas*.



CASE REPORT

Patient Information

A 74-year-old, non-hypertensive, non-diabetic female patient reported to *Shalaky Tantra* OPD, with chief complaints of nasal blockage and difficulty in breathing, associated with sneezing, watery nasal discharge and loss of perception of smell for 4-5 years. The symptoms had aggravated since the past 6 months. No previous surgical or family history regarding the same was reported. (Table 1: Historical and current information of the case)

Clinical Findings

Anterior Rhinoscopy findings revealed the presence of glistening, smooth, pale mass in bilateral nasal cavities. The left and the right nostrils presented with a stage – III and stage – IV Ethmoidal Nasal Polyp, respectively.

Diagnostic Assessment

Nasal examination revealed findings like, presence of smooth pale nasal mass and pale nasal mucosa, indicating the presence of a Nasal Polyp.

(Table 2: National Polyp Grading System)

Diagnosis

Based on the clinical presentation and examination findings, the case was diagnosed as *Nasa Arshas* (Nasal Polyp).

Therapeutic Intervention

Application of *Shodhita Shweta Gunja lepa* over the *Nasa Arshas*.

(Table 03: Therapeutic Intervention)

Purva Karma – *Gunja* (*Abrus precatorius* Linn.), comes under the *Upavisha Varga* in which *Shweta* variety was chosen for this procedure and purification was done by soaking it in *Go Dugdha* for 24 hours. Written consent was obtained from the patient and the attenders prior to the procedure. Patient was advised to be nil per oral 2 hours prior to procedure.

Pradhana Karma – Patient was positioned in a sitting posture with the head tilted to expose the nasal cavity properly. Under all aseptic precautions the nasal cavity was exposed using Thudicum's nasal speculum and the secretion over the polyp was wiped out. *Gunja lepa* was applied over the nasal polyp by using the cotton rolled over the serrated end of Jobson's Probe and retained for 30 minutes. Then it was removed with a fresh piece of cotton rolled over Jobson's probe

Pashchat Karma -The patient was observed for bleeding, pain and burning sensation for a period of 2 hours and advised not to get exposed to dust, smoke, air or breeze.

(Image 01: *Gunja beeja* and *Gunja lepa* preparation)

Time of Procedure – Morning

NUMBER OF APPLICATIONS – 4 applications in both the nostrils on alternative days

Follow-up and Outcomes

Patient's complaints and anterior rhinoscopic findings were assessed before and after using suitable scales. National Polyp Grading System of 4 grades was used for assessing the patient's

complaints. A significant reduction in the symptoms were observed after the treatment, which was evident through clinical examination.

(Table 04: Patient assessment outcome according to Grading system)

DISCUSSION

In the present case report, after 4 sittings of *gunja lepa* application, there was a marked reduction in the size of the polyp, thereby reducing the anatomical obstruction and the patient experienced relief from the symptoms like nasal obstruction and difficulty in breathing which was the patients main concern at the time of admission. Subsequent follow ups on 15th day and 30th day showed a significant relief in the complaints such as nasal obstruction along with the sneezing, mouth breathing along with restoration of smell perception.

Application of *Gunja Lepa* to nasal polyp may have a *Shothahara* action. Abrin is one of the active principles of *Gunja* which inhibits protein synthesis and causes cell destruction. The subunit A of abrin has got N-glycosidase & depurination action of 28-S RNA of ribosome, thereby arresting protein synthesis. So, in turn enhances cell destruction thereby helping in the reduction of the size of nasal polyp. From an Ayurvedic point of view, *Nasarshas* is caused by *Kapha Vata Doshas*. *Gunja* has *Kapha vatahara* and *Shothahara* properties which help in reduction of size of the polyp and inflammation of nasal mucosa.

CONCLUSION

In the present case it was found that application of *Gunja Lepa* over the *Nasa Arshas* showed marked decrease in its size and significant relief from the presenting complaints within a follow up period of 30 days. Further clinical trials on large sample size may be conducted to ascertain findings of these observations. Rather than statistically significant, subjective relief of the patient was more significant. This may be a new hope in the management of nasal polyp where surgical intervention can be avoided.

Patient's Perspective

The patient's response to the treatments was highly positive. Following the treatments, the patient reported significant improvement in his symptoms, experiencing substantial relief from breathing difficulties and notable alleviation of his other complaints.

Declaration of Patient Consent

The authors have secured consent from the patient for publication, with assurances of confidentiality and protection of identity.

Financial Support and Sponsorship

Nil

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. K Sneha P, C Deeraj B, R Deeksha, Simon Anuja K, Effect of Gunja Lepa in Nasarshas (Nasal Polyp) - A Case Series. *J Ayu Int Med Sci.* 2022;7(1):440-443.<https://jaims.in/jaims/article/view/1719>
2. Dhingra P.L, Dhingra S, Dhingra D. Diseases of ear, nose and throat & head and neck surgery. 6th ed. New Delhi, India: Elsevier; 2014.page 172
3. Dhingra P.L, Dhingra S, Dhingra D. Diseases of ear, nose and throat & head and neck surgery. 6th ed. New Delhi, India: Elsevier; 2014.page 20
4. Mohammed sahid gohar, salim azid Niazi, Sohail baber naizi,; Functional Endoscopic Sinus Surgery as a primary modality of treatment for primary and recurrent nasal polyposis; 2017 Mar-Apr; 33(2): 380-382;
5. Tripathi I. rasendra sara samgraha ,3rd Ed. Varanasi; chaukamba Orientalia, 2003;95
6. Priyavath sharma Namarupadayanam Sathya Priya prakashana, Varanasi .1st edition 2000
7. J.L.N. Shastry Dravyaguna Vijnana Chaukhamba Orientalia, Varanasi 2nd edition 2005 vol2;692
8. Dav nath singh gautam, r. Banerji and s. Mahrotra; effect of shodhana on the toxicity of abrus precartoriis; Vol. No 18(2), October 1998 pages 127 – 129
9. Rammath V, Kuttan G, Kuttan R. Effect of Abrin on Cell-Mediated Immune Responses in Mice. *Immunopharmacology and Immunotoxicology.* 2006; 28(2):259-268.

Table 1: Timeline

Historical and current information of the case

| DATE | RELEVANT INFORMATION |
|------------|---|
| 12/08/2023 | Nasal blockage and difficulty in breathing along with sneezing, watery nasal discharge and loss of perception of smell. |
| 15/10/2023 | Underwent home remedies and did not find any relief |
| 2/02/2024 | Patient was advised to use nasal sprays and advised to undergo surgery |
| 24/04/2024 | Admitted to the In-Patient department Ayurvedic treatments were started. |

Table 2: National Polyp Grading System

STAGING ACCORDING TO THE SIZE¹

- Stage I: Limited to the extent of middle turbinate.
- Stage II: Extending beyond the limit of middle turbinate.
- Stage III: Approaching to inferior turbinate
- Stage IV: Going up to the floor of nose

Table 3: Therapeutic intervention





| Date | Treatment |
|------------|----------------------------------|
| 24/04/2024 | Gunja lepa application – Day - 1 |
| 26/04/2024 | Gunja lepa application – Day -2 |
| 28/04/2024 | Gunja lepa – Day -3 |
| 30/04/2024 | Gunja lepa – Day -4 |

Image 01: Gunja Lepa Preparation





Table 04: Patient assessment outcome according to grading system

| | RIGHT NOSTRIL | LEFT NOSTRIL |
|---|--|---|
| BEFORE TREATMENT |  GRADE III- NASAL POLYP | GRADE III- NASAL POLYP  |
| AFTER TREATMENT AFTER - 4 SITTINGS OF GUNJA LEPA |  GRADE II -NASAL POLYP |  GRADE I -NASAL POLYP |