



EFFECT OF PALASHA KSHARA PRATISARANA IN THE MANAGEMENT OF CHRONIC INFERIOR TURBINATE HYPERTROPHY -A CASE REPORT

Dr Deeraj BC¹, Dr Amarnath H K², Dr Vigneshwaran K.S.³, Dr Preethi⁴

¹Associate Professor, Dept. of Shalaky Tantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda, Hassan, Karnataka, India

²Associate Professor, Dept. of Shalaky Tantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda, Hassan, Karnataka, India

³PG. Scholar, Dept. of Shalaky Tantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda, Hassan, Karnataka, India

⁴ PG. Scholar, Dept. of Shalaky Tantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda, Hassan, Karnataka, India

ABSTRACT

Inferior turbinate is an elongated, scroll like paired structure of the lateral nasal wall which consists of a central layer of bone and a mucosal layer of either side¹. Chronic nasal obstruction secondary to hypertrophied inferior turbinate is one of the most common problems seen in Rhinology and significantly affects day-to-day activities of the patients². Anterior rhinoscopy examination in chronic hypertrophic rhinitis shows hypertrophy of turbinates and maximum changes are seen in the inferior turbinates.³ A 54-year-old-male reported to outpatient department of ENT, Sri Dharmasthala Manjunatheshwara college and hospital, Hassan with complaints of nasal blockage, difficulty in nasal breathing and loss of sleep since 6 to 7 years. patient also complained of sneezing and nasal discharge on and off since 3 to 4 years. Anterior rhinoscopy showed right compensatory inferior turbinate hypertrophy secondary to left DNS and managed with ayurvedic intervention. Palasha Kshara Pratisarana over hypertrophied turbinates was done here. The treatment was effective in the present case with relief in his presenting complaints with the follow up period of 45 days. This case report revealed that using Kshara karma (an ayurvedic para surgical procedure), the nasal blockage due to chronic inferior turbinate hypertrophy could be managed effectively.

INTRODUCTION

Hypertrophied turbinate is characterised by thickening of mucosa, submucosa, serous mucinous glands, periosteum and bone in inferior turbinate. Nasal obstruction is the predominant symptom seen along with symptoms such as difficulty in nasal breathing, sneezing, Nasal discharge, heaviness of head, head ache and transient anosmia. Anterior rhinoscopy examination in chronic hypertrophic rhinitis patient shows hypertrophy of turbinates and maximum changes are seen in the inferior turbinates.³ There are various causes for inferior turbinate hypertrophy which are allergic rhinitis, chronic hypertrophic rhinitis, vasomotor rhinitis, chronic infective rhinitis, deviated nasal septum and rhinitis medicamentosa. The medical management in contemporary science includes medications of antihistamines, decongestants and topical corticosteroids; these drugs provide symptomatic improvement, in most of the patients. The preferred treatment modality in modern system of medicine is surgical management, many surgical techniques have been used and mostly ending in diminishing the normal function nasal mucosa, submucosa and turbinate parenchyma with other complications.⁴

CASE REPORT

A 54-year-old-male patient, presented with complaints of severe nasal blockage, difficulty in nasal breathing, recurrent cold episodes and loss of sleep since 6 to 7 years and symptoms

aggravated in the last 6 months. patient was not having previous history of diabetes mellitus, hypertension and coronary illness. No previous surgical history reported. On anterior rhinoscopy examination patient was diagnosed as right compensatory inferior turbinate hypertrophy grade 4 (Friedman's grading system) secondary to left DNS. patient had consulted elsewhere for the same and advised for surgical management. Since patient was not willing for surgery and interested in ayurvedic treatment he approached to Sri Dharmasthala Manjunatheshwara college and hospital of ayurveda, Hassan, Karnataka. Treated with Palasha Kshara Pratisarana over right hypertrophied inferior turbinate.

THERAPEUTIC INTERVENTION

Purva Karma – written Consent was obtained from the patient and attenders before procedure. Patient was advised to be in nil by mouth 4 hours prior to ksharakarma. patient was asked to be in a sitting posture with the head tilted to expose the nasal cavity properly. Lidocaine 10% spray was used to anesthetise the turbinate and to avoid the sneezing reflex.

Pradhana karma – Under all aseptic precautions the nasal cavity is exposed using Thudicum's nasal speculum and the secretion over the turbinate was wiped out. Palasha Kshara was applied over the medial surface of the exposed turbinate by using the cotton rolled over serrated end of jobson's probe for 60 seconds. Then Kshara was removed with cotton rolled to

jobsons probe and lemon juice was applied to the turbinates to neutralize the remaining Kshara..

Pashchat Karma -The patient was observed for bleeding, pain, burning sensation over the period of 2 hours and advised not to exposure to air or breeze, dust and smoke and to take light diet for 3 days.

FOLLOW UP ASSESMENT AND OUTCOME





1. Post operatively, on 3rd day, anterior rhinoscopy was done, no adhesions seen and nasal toileting done with normal saline to remove the nasal slough. no complaints of pain, bleeding or burning sensation reported.

2. Second follow up on 7th day, on examination revealed size of the inferior turbinate reduced considerably from grade 4 to grade 2 and the patient got significant relief from nasal block.

3. Third follow up done on 15th day of Kshara application, patient was re assessed, anterior rhinoscopy revealed reduction in the turbinate size to grade 1 and the patient feels marked relief from nasal blockage and mouth breathing.

4. Further patient was reviewed after 45days of Kshara application, on anterior rhinoscopy the turbinate size remained to be at grade 1, which had reduced from grade 4 by 15th day of treatment, other presenting complaints such as nasal blockage, difficulty in nasal breathing, recurrent episodes of cold attacks and loss of sleep reduced considerably.

BEFORE AND AFTER TREATMENT PHOTOGRAPHS

	<p>Before Kshara application. Picture showing grade 4 inferior turbinate hypertrophy</p>
	<p>7th day of follow up. size of the inferior turbinate reduced considerably from grade 4 to grade 2</p>
	<p>15th day of follow up. size of the inferior turbinate reduced to grade 1</p>
	<p>45th day of follow up. NO HYPERTROPHY OF INFERIOR TURBINATE</p>



DISCUSSION

In the present case study, there was a marked reduction in the nasal obstruction which was the main concern on first visit and was able to sleep comfortably after 1 week of Kshara karma. During the entire follow up period no other internal medications given to the patient. Kshara karma helped to reduce the size of the hypertrophied inferior turbinates thereby reducing the anatomical obstruction in the pathway.

Kshara karma is the treatment modality which has been advocated in Adhimamsa [extra muscular growth], arshas[haemorrhoids], arbuda[tumour].⁵ The increase in turbinate size as well as submucosal and mucosal hypertrophy can be taken as Adhimamsa [extra muscular growth]. The effect of Kshara karma on hypertrophied turbinates is based on coagulation of venous sinusoids within the turbinate, heading to submucosal fibrosis and reduction of inferior turbinate volume.⁶ It penetrates deep into the mucosal and submucosal structures of hypertrophied turbinates leading to submucosal fibrosis and as the anterior end of the inferior turbinate is erectile tissue and coagulation of it causes reduction of size over it and reduces the symptoms like nasal obstruction, breathing difficulty. Kshara because of its ksharana karma and Lekhana karma, cause tissue necrosis and thereby reduction in the turbinate volume observed. Kshara because of its soshana guna and ushna veerya of palasha kshara dries the nasal mucosa which helps in reduction in the nasal discharge. Palasha Kshara karma desensitizing the anterior end of the erectile tissue of inferior turbinate by its alkaline nature so that neutralizing irritants or allergens in the nasal passages thus reduce the sneezing reflex.

CONCLUSION

In the present case it was found that one time application of Palasha Kshara over the right hypertrophied inferior turbinate showed marked decrease in its size and significant relief from his presenting complaints with a follow up period of 45 days.

Further clinical trials on large sample size may be conducted to ascertain findings of these observations.

Patient Perspective

The patient was satisfied with the Ayurveda treatment as his nasal block and episodes of cold attacks were reduced significantly. He felt better in carrying out his daily activities.

Informed Consent

Informed consent for publication of the data was taken from the patient.

BIBLIOGRAPHY

1. Berger G, Balum-Azim M, Ophir D, *The normal inferior turbinate: histomorphometry analysis and clinical implications. Laryngoscope* 2003; 113:1192-1198.
2. Taneja Mutneja Mkhitar turbinate diathermy cautery v/s high frequency in inferior turbinate hypertrophy. *Indian J Otolaryngology head neck surgery*.2010;62(3):317-21[pub med] [google scholar].
3. Dhingra PL, Dhingra S. *Diseases of ear, nose & throat and head & neck surgery - e-book*. 2021. Elsevier Health Sciences. ISBN 813126386X.
4. Hol MK, Huizing EH. *Treatment of inferior turbinate pathology: a review and critical evaluation of the different techniques. Rhinology*. 2000 Dec 1;38(4):157-66.
5. Susrutha;Susrutha Samhita ,Ayurveda tatva sandipika,Dr Ambikadatta shastri,sutra sthana-11/5,Varanasi,chowkamba krishnadas academy2004.p.46.
6. Tzeng JC, Wu CH, Tsai TC. *Thermal cautery vs. radiofrequency ablation for inferior turbinate hypertrophy: A randomized controlled trial. American Journal of Rhinology & Allergy*. 2019;33(2):156-162.