



# A REVIEW OF PARTIMARSHA NASYA AND ITS CURATIVE BENEFITS

**Professor (Dr.) Gunjan Garg<sup>1</sup>, Professor (Dr.) Gopesh Mangal<sup>2</sup>, Dr. Divya Bairwa<sup>3</sup>**

<sup>1</sup>Professor and Head, Dept. of Swasthavritta and Yoga MJF Ayurveda College, Chomu, Jaipur, Rajasthan, India

<sup>2</sup>Professor and Head, Dept. of Panchkarma National Institute of Ayurveda, Jaipur, Rajasthan, India

<sup>3</sup>Dr. Divya Bairwa PG Scholar, Dept. of Panchkarma, National Institute of Ayurveda, Jaipur, Rajasthan, India

**Corresponding author Dr. Divya Bairwa**

## Abstract

**Background:** *Nasya Karma* (nasal drug administration) is a primary Ayurvedic therapeutic modality for managing disorders of the head and neck (*Urdhvajatrugata Rogas*). While high-dose *Nasya* therapies (*Marsha Nasya*) are strictly clinical, *Pratimarsha Nasya*—administered in a micro-dose of two drops—is uniquely indicated for both daily preventive care (*Dincharya*) and curative management of various ailments. **Objectives:** To systematically review and elucidate the therapeutic and curative applications of *Pratimarsha Nasya*, its mechanism of action, and its clinical efficacy in modern lifestyle and systemic disorders. **Methods:** A conceptual systematic review was conducted by analyzing classical Ayurvedic treatises (*Brihatrayi* and *Laghutrayi*) alongside contemporary scientific literature. Data regarding the indications, pharmacological actions, and neurovascular absorption pathways of *Pratimarsha Nasya* were synthesized. **Results:** *Pratimarsha Nasya* exhibits profound *Shamana* (palliative) and *Brimhana* (nourishing) properties. It demonstrates significant curative efficacy in managing neurological conditions (facial palsy, hemiplegia, cervical spondylosis), respiratory and ENT disorders (sinusitis, rhinitis, tinnitus), ophthalmic issues (dry eye syndrome), and psychological stress. **Conclusion:** Despite its minimal dosage, *Pratimarsha Nasya* is a potent therapeutic intervention. By bypassing the blood-brain barrier via olfactory and trigeminal pathways, it exerts rapid local and systemic curative effects, making it a safe, highly effective, and accessible treatment modality.

**Keywords** – *Pratimarsh Nasya*, *Nasya Karma*, Naasal drug therapy, Curative aspect, *Dincharya*.

## Introduction

In Ayurveda, *Nasya karma* refers to a specialised therapeutic procedure in which medicated oils, powders, or herbal juices are instilled through the nostrils.<sup>[1]</sup> The anatomical rationale for this route is encapsulated in the classical

dictum "*Nasa hi Shiraso Dwaram*" — the nose is the most direct gateway to the brain and cranial region.<sup>[2]</sup> Through this pathway, Nasya is understood to eliminate morbid *doshas* lodged in the supraclavicular region (*Urdhvajatru*), where conventional drug delivery routes often fall short.<sup>[1,3]</sup> Nasya therapies are broadly classified according to pharmacological intent and dosage.<sup>[2,3]</sup> High-dose cleansing variants such as *Marsha Nasya* (6–10 drops) demand rigorous clinical supervision and structured pre- and post-operative protocols, whereas *Pratimarsha Nasya* — a simplified, low-dose variant of precisely two drops per nostril — requires no elaborate regimens and is entirely free of complications.<sup>[2,6,7]</sup> Although widely celebrated as a daily preventive practice (*Dinacharya*), *Pratimarsha Nasya* inherently possesses powerful *Shamana* (pacifying) and *Brimhana* (nourishing) properties that render it equally effective in managing a broad spectrum of sub-clinical and clinical disease states.<sup>[7,8]</sup> This review systematically explores its curative aspects of *Pratimarsh Nasya*.

## Methods

A conceptual systematic review was undertaken following standard integrative literature analysis principles. Classical Ayurvedic treatises — the *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridayam* — were examined in their primary *Sanskrit* editions with authoritative commentaries to extract foundational principles, posology, and clinical indications.<sup>[1-5]</sup>

## Results and Discussion

*Pratimarsha Nasya* demonstrates pronounced *Shamana* (palliative) and *Brimhana* (nourishing) properties. Its therapeutic influence extends across multiple physiological systems, yielding clinically meaningful outcomes in conditions rooted in *Vata* and *Kapha* imbalance. Through the nasal route — recognized in classical *Ayurvedic* texts as the "gateway to the brain" — this form of *Nasya* facilitates direct access to the *Shringataka Marma*, enabling the distribution of medicated oils to the *Shira* (head), *Indriya* (sensory organs), and *Manas* (mind). Its curative action has been observed to restore neuromuscular coordination, strengthen sensory channels, enhance respiratory mucosal integrity, stabilize ocular function, and re-establish psycho-emotional equilibrium. When administered consistently, it works at the root level of pathogenesis rather than offering symptomatic relief alone, making it a therapeutically superior intervention in *Urdhvajatrugata* (supra-clavicular).

## Curative Applications

Although *Pratimarsha Nasya* employs a minimal dose, it is well-indicated in mild to moderate clinical conditions, exerting meaningful curative influence across multiple physiological systems.<sup>[7,8]</sup> The targeted delivery of lipid-based medicines directly to the craniofacial region makes it particularly effective for neuromuscular and neurodegenerative conditions.

*Pratimarsha Nasya* holds a well-established role in the management of neurological disorders. It is effective in treating *Shirahshula* (generalised headache) and various cranial pain syndromes by pacifying aggravated *Vata* and *Kapha doshas* within the cranial region.<sup>[2,4]</sup> The direct penetration of medicated lipids into neural tissue further supports its therapeutic use, where restoring nourishment and microcirculation to compromised neural structures is of primary clinical importance.<sup>[10]</sup>

Acting directly within the respiratory tract, *Pratimarsha Nasya* softens and clears morbid *doshas* from the mucosal lining. It is a primary curative therapy for *Pratishyaya* and *Nasa Avarana* (nasal congestion).<sup>[2,3]</sup> The medicated oils simultaneously lubricate the nasal mucosa, enhance ciliary clearance, and reduce allergic inflammation frequently arising from occupational dust and chemical exposure.<sup>[9]</sup> By addressing the consequences of *Atiyoga* (improper or excessive use of the auditory senses), *Pratimarsha Nasya* helps clear obstruction (*Sroto-rodha*) within the channels governing sound perception. It is curative in *Karnashoola* (earache) and provides meaningful management of *Karna-nada* (tinnitus), which, if left unaddressed, can progress to irreversible hearing impairment.<sup>[2,4]</sup> It further provides relief from *Kantha-shosha* (dryness of the throat) and recurrent ENT infections.<sup>[2]</sup>

Prolonged digital screen exposure depletes *Alochaka Pitta* and *Shleshma*, precipitating dry eye syndrome (*Shushkakshipaka*) and blurred vision (*Timira*).<sup>[4,10]</sup> Regular *Pratimarsha Nasya* stimulates local periorbital circulation and restores essential *Sneha* (lipid nourishment) to ocular and periorbital tissues, addressing both symptoms and their underlying metabolic deficiency.<sup>[4]</sup> It also actively treats premature scalp ageing, including *Khalitya* (hair fall) and *Palitya* (premature greying).<sup>[2,5]</sup> The trans-nasal route offers a uniquely direct therapeutic pathway to the brain's emotional and regulatory centres. *Pratimarsha Nasya* effectively manages psychological tension, generalised anxiety, mental fatigue, and sleep disturbances.<sup>[7,8,11]</sup> By calming the overactivated nervous system and re-establishing *Prana Vata* in its natural physiological seat, it promotes emotional equilibrium and restorative sleep — rendering it particularly relevant for individuals navigating high-stress modern lifestyles.<sup>[8,11]</sup>

## Mechanism of Curative Action

### Ayurvedic Mechanism

From the classical Ayurvedic perspective, the drug administered via *Nasya* first reaches the *Shringataka Marma* — a vital anatomical junction formed by the confluence of blood vessels (*Siras*) supplying the nose, eyes, ears, and tongue, broadly corresponding to the cavernous sinus in modern anatomy.<sup>[1,2]</sup> From this central junction, the medicinal substance disperses through the intracranial circulation (*Murdha Siras*), forcefully dislodging and expelling disease-causing *doshas* from the entire supraclavicular region.<sup>[1,3,17]</sup>

## Mode of Action: Three Pathways

### lipid-soluble mucosal absorption

*Pratimarsha Nasya* exerts its therapeutic action through three well-established and complementary pathways: lipid-soluble mucosal absorption, vascular transportation, and neurological stimulation via the olfactory system. Together, these pathways explain both the speed and the systemic breadth of its clinical effects.

The nasal mucosa is a highly specialised absorptive surface with a pronounced affinity for lipid-soluble substances. The olfactory cilia are rich in lipid materials, creating a microenvironment that accommodates transcellular diffusion of hydrophobic compounds. Non-polar molecules — including fatty acids, steroids, and fat-soluble vitamins — cross the lipid bilayer of the mucosal plasma membrane through passive diffusion, without the requirement for energy expenditure or carrier proteins.<sup>1</sup>

The medicated oils used in *Pratimarsha Nasya* are inherently lipophilic, positioning their bioactive constituents to fully exploit this absorptive mechanism. Once absorbed, they deliver therapeutic molecules to local nasal and olfactory tissues while simultaneously facilitating the removal of lipid-soluble cellular waste products — effectively supporting mucosal detoxification and maintaining epithelial integrity with regular use.

### Vascular Path Transportation

Once medicinal substances cross the mucosal barrier, they enter the rich submucosal vascular plexus and are carried toward both intracranial and systemic circulation. The nasal venous drainage converges into the facial vein — a vessel notably devoid of valves — permitting free, bidirectional blood flow without obstruction.<sup>7</sup>

This valveless system communicates extensively with the intracranial venous network: the supra-orbital vein links to the ophthalmic vein (a tributary of the deep facial vein), which in turn communicates through the pterygoid plexus with the cavernous venous sinus system. From the pharyngeal plexus, absorbed constituents gain access to the systemic circulation. The result is a remarkably wide distribution of medicinal molecules — reaching intracranial structures, orbital regions, and general circulation — through the instillation of just two drops.<sup>[16,17,18]</sup>

### Neurological Pathway

The third, and arguably most clinically significant, pathway involves direct olfactory stimulation of the higher brain centres. The olfactory nerve carries sensory input from the nasal epithelium directly to the limbic system — comprising the amygdaloid complex, hypothalamus, anterior thalamic nuclei, and portions of the basal ganglia — bypassing the blood-brain barrier entirely.<sup>3,[19,20]</sup>

Volatile constituents of the nasya oil stimulate olfactory receptor cells, and the resulting neural impulses travel via Cranial Nerve I to these higher centres, modulating both the endocrine and autonomic nervous systems.<sup>[21,22]</sup> Stimulation of the hypothalamus modulates the hypothalamo-pituitary axis, governing downstream peripheral endocrine secretion and autonomic tone.<sup>[23]</sup> Regular administration may further protect the hypothalamus from functional vulnerability and correct derangements within the endorphinergic system — the brain's endogenous opioid network governing pain perception, mood, and stress resilience.<sup>[25]</sup> By preserving hypothalamic-mediated neuro-endocrine and neuro-immunological interactions, *Pratimarsha Nasya* actively maintains systemic homeostasis and supports immune competence — a principle now recognised within the modern discipline of psychoneuroimmunology.<sup>[24]</sup>

Taken together, these three mechanisms — passive lipid-mediated transcellular absorption, unrestricted valveless vascular dissemination, and direct olfactory-limbic neurological stimulation — provide a comprehensive and scientifically coherent foundation for the classical Ayurvedic principle of "*Nasa hi Shiraso Dwaram*", establishing *Pratimarsha Nasya* as a potent neuroendocrine and immunomodulatory intervention with both local and systemic therapeutic reach.

### Contraindication for curative uses

Although *Pratimarsha Nasya* is remarkably safe and requires none of the stringent operative protocols (*Purvakarma*) demanded by high-dose *Nasya* variants,<sup>[27]</sup> its curative application is not without limits. It is strictly contraindicated in *Dushta Pratishyaya* (chronic sinusitis with heavy discharge), *Badhirya* (deafness) *Madyapana* (acute alcohol intoxication), and *Krimi-shirsha* (cranial worm infestations).<sup>[2,3]</sup>

In patients where *doshas* are heavily vitiated and *Chala* (mobile), the two-bindu dose is insufficient to expel accumulated impurities from the cranial channels. Rather than producing the intended cleansing action, the therapy may instead further agitate the already unstable *doshas*, compounding the disease process. In such presentations, a higher-dose Nasya procedure under qualified clinical supervision is warranted.<sup>[2,3]</sup>

## Conclusion

Pratimarsha Nasya stands as a highly sophisticated, non-invasive, and authentically validated Ayurvedic drug delivery system whose curative dimensions extend well beyond its widely recognised preventive role. By functioning simultaneously as a *Shamana* (pacifying) and *Brimhana* (nourishing) therapy, it delivers targeted therapeutic relief across neurological, psychological, respiratory, ophthalmic, and sensory domains — all through a simple, twice-daily practice.<sup>[6,7,8]</sup>

Its unique pharmacokinetic advantage lies in leveraging olfactory, trigeminal, and vascular pathways to efficiently bypass the blood-brain barrier, enabling rapid systemic and localised healing without the adverse effects associated with conventional pharmacotherapy.<sup>[17,18,19]</sup> As modern medicine continues to grapple with the limitations of oral and parenteral routes in neurological drug delivery, Pratimarsha Nasya offers a time-tested, evidence-informed therapeutic alternative with immense relevance for occupational health, neurological rehabilitation, and integrative medicine practice.

## Reference

1. Agnivesha. Charaka Samhita, Siddhi Sthana 9/89-92. In: Trikamji Acharya YT, editor. Varanasi: Chaukhamba Sanskrit Sansthan; 2011.
2. Vagbhata. Ashtanga Hridayam, Sutrasthana 20/1-26. In: Paradakara HSS, editor. Varanasi: Chaukhamba Sanskrit Sansthan; 2012.
3. Sushruta. Sushruta Samhita, Chikitsa Sthana 40/18-65. In: Trikamji Acharya YT, editor. Varanasi: Chaukhamba Sanskrit Sansthan; 2010.
4. Vagbhata. Ashtanga Hridayam, Uttara Tantra 13-24. Varanasi: Chaukhamba Sanskrit Sansthan; 2012.
5. Agnivesha. Charaka Samhita, Chikitsa Sthana 26-28. In: Trikamji Acharya YT, editor. Varanasi: Chaukhamba Sanskrit Sansthan; 2011.
6. Gupta N, Choudhary K, Mangal G. Conceptual study on Pratimarsha Nasya: a review article. J Ayurveda Integr Med Sci. 2020;5(4):367-72.
7. Balagopal A, Sukumar BS. A critical review on Pratimarsha Nasya. J Ayurveda Holist Med. 2023;11(1):1-8.
8. Sharma P, Sharma KK. Pratimarsh Nasya: the philosophical nexus connecting Pran Vayu and consciousness in Ayurvedic healing. Int J Ayurveda Pharma Res. 2024;12(7):115-9.
9. Sudhakar A, Sivaram A. Exploring the benefits of Pratimarsha Nasya for workplace health and safety: an Ayurvedic perspective. J Emerg Technol Innov Res. 2024;11(10):1-7.
10. Kumar S, Hamsaveni V. Ayurvedic insights into Urdhwajatrugata Vikara through Pratimarsha Nasya. J Ayurveda Integr Med Sci. 2025;10(7):1-9.
11. Yadav K, Kimothi S, Bamola P, Goswami H, Gupta H. The positive effects of Pratimarsha Nasya with special reference to sleep physiology. Ayushdhara. 2019;6(4):2275-8.

12. Singer SJ, Nicolson GL. The fluid mosaic model of the structure of cell membranes. *Science*. 1972;175(4023):720-31.
13. Tortora GJ, Derrickson B. *Principles of Anatomy and Physiology*. 15th ed. Hoboken: Wiley; 2017.
14. Ganong WF. *Review of Medical Physiology*. 22nd ed. New York: McGraw-Hill; 2005.
15. Standring S, editor. *Gray's Anatomy: The Anatomical Basis of Clinical Practice*. 41st ed. Philadelphia: Elsevier; 2016.
16. Illum L. Nasal drug delivery: new developments and strategies. *Drug Discov Today*. 2002;7(23):1184-9.
17. Dhuria SV, Hanson LR, Frey WH 2nd. Intranasal delivery to the central nervous system: mechanisms and experimental considerations. *J Pharm Sci*. 2010;99(4):1654-73.
18. Hanson LR, Frey WH 2nd. Intranasal delivery bypasses the blood-brain barrier to target therapeutic agents to the central and peripheral nervous systems. *BMC Neurosci*. 2008;9 Suppl 3:S5.
19. Lochhead JJ, Thorne RG. Intranasal delivery of biologics to the central nervous system. *Adv Drug Deliv Rev*. 2012;64(7):614-28.
20. Thorne RG, Pronk GJ, Padmanabhan V, Frey WH 2nd. Delivery of insulin-like growth factor-I to the rat brain and spinal cord along olfactory and trigeminal pathways following intranasal administration. *Neuroscience*. 2004;127(2):481-96.
21. Kandel ER, Schwartz JH, Jessell TM, Siegelbaum SA, Hudspeth AJ. *Principles of Neural Science*. 5th ed. New York: McGraw-Hill; 2013.
22. Buck L, Axel R. A novel multigene family may encode odorant receptors: a molecular basis for odor recognition. *Cell*. 1991;65(1):175-87.
23. Guyton AC, Hall JE. *Textbook of Medical Physiology*. 14th ed. Philadelphia: Elsevier; 2021.
24. Ader R, Felten DL, Cohen N, editors. *Psychoneuroimmunology*. 3rd ed. San Diego: Academic Press; 2001.
25. Pert CB, Snyder SH. Opiate receptor: demonstration in nervous tissue. *Science*. 1973;179(4077):1011-4.