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Importance of Nidra in Pratishyaya: An Ayurvedic and Contemporary Correlative Review

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Abstract: ***The nose is a vital sense organ and the primary gateway of respiration, continuously exposed to environmental factors such as dust, allergens, microbes, and temperature variations. Due to this constant exposure, it is one of the most susceptible organs to disease. Pratishyaya, one among the Nasa rogas, corresponds broadly to rhinitis in contemporary medicine and significantly affects quality of life, work efficiency, and sleep. Increasing prevalence of Pratishyaya is closely linked to lifestyle disturbances rather than infection alone. Nidra, one among the Trayopasthambha, plays a crucial role in maintaining immune balance, and physiological homeostasis. Disruption of sleep is increasingly recognized in modern medicine as a contributor to immune dysregulation and chronic inflammatory disorders. This article highlights the importance of Nidra in the development, severity, and recurrence of Pratishyaya through Ayurveda principles and contemporary on sleep, mucosal immunity, and upper airway inflammation.***

Keywords: *Pratishyaya, Nidra* disturbance, Life style related Rhinitis, Mucosal immunity, Ayurveda sleep principles

1. Introduction

Pratishyaya is one of the most frequently encountered ENT disorders in Ayurveda practice, and is described under *Nasa rogas* in classical texts. It manifests as nasal secretion produced due to vitiation of *Vata* and *Kapha doshas* at the root of nose. In modern medicine, it broadly encompasses different types of rhinitis. It is a common condition disease worldwide, causing significant discomfort and impairment in daily activities. Persistent nasal discharge and recurrent episodes often interfere with normal life and work efficiency.

Ayurveda clearly identifies improper sleep as an important causative factor for *Pratishyaya*. Modern research further supports the view that sleep quality influences nasal mucosal immunity and airway inflammation. Understanding this connection highlights *Nidra* as a key preventive and therapeutic focus in the management of *Pratishyaya.*

2. Aims and Objectives

This article evaluates the role of *Nidra* in the pathogenesis and recurrence of *Pratishyaya* and analyses Ayurvedic mechanisms linking sleep disturbance and nasal disorders with modern evidence, highlighting the therapeutic importance of regulating sleep in *Pratishyaya* management.

3. Pratishyaya

- *Prati*- against the direction and
- *Syaya*- means movement

Definition:
"Pratikshanam shyayate iti" ie, continuous flowing of secretions. [1]

The disease in which *Kaphadi doshas* moves towards the direction of *Vata dosha* is called as *Pratishyaya* [2]. The disease *Pratishyaya* is classified into five types i.e., *Vataja, Pittaja, Kaphaja, Raktaja*, and *Sannipataja* by Acharya Sushruta [3] and Vagbhata[4].

Nidra is regarded as one among the "*Trayopastambha*," which play a vital role for maintenance of health in human being [5]. Among the *Nidanas* of *Pratishyaya*, *Ratri jagarana* and *Atiswapna* are explained. *Ratrijagarana* increases *Ruksha guna* thereby causing *Vata prakopa*. It reduces lubrication of nasal mucosa and leads to dryness (*Shushkata*), which predisposes to dust/allergen sensitivity. *Atiswapna* increases *Snigdha guna* thereby causing *Kapha prakopa*. It encourages excessive mucus formation, leads to sluggish drainage of nasal passages.

Rhinitis is among the most common chronic diseases worldwide and is a generic term describing nasal symptoms resulting from inflammation and/or dysfunction of the nasal mucosa. The prevalence of unspecified rhinitis ranges up to 50% in Asia. India is home to approximately 20% of the world's population, and allergic diseases such as allergic rhinitis have shown a rising trend in recent decades. The documented occurrence of allergic rhinitis in India ranges from 20% to 30%. [6]

4. Importance of sleep

Experimental and clinical studies demonstrate a bidirectional relationship between sleep and the immune system. Inflammatory and infectious conditions are often associated with altered sleep patterns, including reduced, fragmented, or non-restorative sleep. The nature and extent of these changes depend on disease severity, immune activation, and associated symptoms. In chronic inflammatory conditions, persistent sleep disturbance further aggravates immune dysregulation, creating a vicious cycle between disease activity and impaired sleep. [7]

4.1 Sleep and mucosal immune response

Sleep deprivation compromises nasal mucosal immunity by reducing secretory IgA levels, suppressing natural killer cell activity, and increasing pro-inflammatory cytokines such as IL-6 and TNF-α, thereby weakening the first line of defense

of the upper airway and predisposing individuals to recurrent nasal inflammatory disorders. [7]

4.2 Nasal cycle physiology

The nasal cycle is a physiological alternation of nasal airflow regulated by autonomic nervous system oscillations. Disturbance of sleep–wake rhythm disrupts this autonomic periodicity, leading to prolonged nasal congestion, impaired mucociliary clearance, and increased susceptibility to nasal inflammatory disorders. [8]

4.3 Melatonin involvement

Melatonin, a circadian rhythm–regulating hormone secreted during sleep, exhibits significant immunomodulatory and anti-inflammatory properties. Reduced melatonin secretion due to disturbed sleep has been associated with increased inflammatory cytokine activity and mucosal immune dysfunction, thereby predisposing individuals to recurrent nasal inflammatory disorders. [9]

5. Discussion

The mechanisms described in both Ayurveda and modern frameworks demonstrate convergence. Sleep deprivation produces a physiological state characterized by reduced mucosal hydration, increased stress hormones, and elevated inflammatory cytokines, resulting in nasal mucosal dryness and hypersensitivity. This state closely correspond to the Ayurveda concept of *Vata dosha* vitiation and increased *Rukshata*, which predispose the nasal passages to dryness, sneezing, and recurrent inflammatory episodes. Conversely, excessive sleep promotes parasympathetic dominance, reduced physical activity, and increased glandular secretion, leading to mucus accumulation and nasal congestion. This mirrors *Kapha dosha Vridhi* described in Ayurveda, where *Snigdha* and *Sheeta guṇas* result in heaviness and obstruction of the nasal passages.

The *Vata* and *Kapha dosha* imbalance resulting from improper sleep parallels the inflammatory and mucosal dysfunction observed in sleep-disturbed individuals. The immune deficits following sleep loss corresponds to *Ojas* depletion and reduction in the *Bala*. Thus, *Nidra* is not merely rest, but a determinant of immune resilience influencing nasal disease frequency. The relationship between *Nidra* and *Pratishyaya* is bidirectional, forming a pathological cycle:

Poor sleep ⇄ nasal obstruction ⇄ inflammation ⇄ worsening sleep

Breaking this cycle through sleep hygiene and *Nidra-janana* interventions may reduce the recurrence in *Pratishyaya* patients.

6. Conclusion

Ayurveda has long acknowledged improper *Nidra* as one of the contributing *Nidanas* for *Pratishyaya*, indicating an early understanding of the relationship between sleep, immunity, and nasal disorders. Sleep disturbance leading to vitiation of *Vata* and *Kapha*, depletion of *Ojas*, and dysfunction of *Nasa srotas* demonstrate close functional concordance with contemporary findings in sleep medicine, immunology, and respiratory physiology. Modern research confirms that disturbed sleep alters neuro-immune regulation, impairs mucosal defense mechanisms, and enhances inflammatory responses within the upper airway. Recognizing sleep as a modifiable lifestyle factor therefore provides an important opportunity for improving prevention strategies, reducing recurrence, and optimizing therapeutic outcomes in *Pratishyaya*. Further clinical and experimental research is justified to validate specific Ayurveda interventions targeting sleep in *Pratishyaya* patients.

References

[1] Amarasimha. *Amarakosha* with Ramashrami (Vyakhyasudha) commentary. Reprint ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2012. Dvitiya Kanda 2–6/51. p. 282.
[2] Sharma AR. *Sushruta Samhita* with Sushrutavimarshini Hindi commentary. Reprint ed. Varanasi: Chaukhamba Subharati Prakashan; 2004. Uttara Tantra 24/1. p. 176.
[3] Sharma AR. *Sushruta Samhita* with Sushrutavimarshini Hindi commentary. Reprint ed. Varanasi: Chaukhamba Subharati Prakashan; 2004. Uttara Tantra 24/6–13. p. 177–178.
[4] Murthy KRS. *Ashtanga Hridayam*. Reprint ed. Varanasi: Chowkhamba Krishnadas Academy; 2004. Uttara Sthana 19/3. p. 173.
[5] Kushavaha HC, editor. *Charaka Samhita* with Chakrapanidatta commentary. Reprint ed. Varanasi: Chowkhamba Prakashan; 2005. Sutrasthana 11/35. p. 117.
[6] Sundararaman V, Ponni AS. Epidemiology of allergic rhinitis in India: a systematic review. *Int J Acad Med Pharm*. 2023;5(5):1408–1413.
[7] Besedovsky L, Lange T, Haack M. The sleep–immune crosstalk in health and disease. *Physiol Rev*. 2019;99(3):1325–1380.
[8] Eccles R. The nasal cycle in health and disease. *Acta Otolaryngol*. 2000;120(2):316–319.
[9] Kim J. Melatonin and inflammation. *Int J Mol Sci*. 2022;23(4):2192.

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