

## THE ROLE OF BASTI PANCHAKARMA THERAPY IN THE PREVENTION AND TREATMENT OF NETRA ROGA: A REVIEW OF AYURVEDIC RESEARCH AND CLINICAL PRACTICE

Shukla Chandranshu<sup>1</sup>, Gaikwad Pranesh P.<sup>2\*</sup>, Nakade Mamata<sup>3</sup>, Chaudhari Vaishali R.<sup>4</sup> and Bondge Pooja<sup>5</sup>

<sup>1,5</sup>P.G. Scholar, Department of Panchakarma, Dr. D. Y. Patil College of Ayurveda and Research Centre, Dr. D. Y. Patil Vidyapeeth (Deemed to be University), Pimpri, Pune 411018, Maharashtra, India.

<sup>2</sup>Associate Professor, Department of Panchakarma, Dr. D. Y. Patil College of Ayurveda and Research Centre, Dr. D. Y. Patil Vidyapeeth (Deemed to be University), Pimpri, Pune 411018, Maharashtra, India.

<sup>3</sup>Professor and H.O.D, Department of Panchakarma, Dr. D. Y. Patil College of Ayurveda and Research Centre, Dr. D. Y. Patil Vidyapeeth (Deemed to be University), Pimpri, Pune 411018, Maharashtra, India.

<sup>4</sup>Professor, Department of Panchakarma, Dr. D. Y. Patil College of Ayurveda and Research Centre, Dr. D. Y. Patil Vidyapeeth (Deemed to be University), Pimpri, Pune 411018, Maharashtra, India.

Article Received on  
04 December 2024,

Revised on 24 Dec. 2024,  
Published on 14 Jan. 2025

DOI: 10.20959/wjpr20252-35354



**\*Corresponding Author**

**Dr. Gaikwad Pranesh P.**

Associate Professor,  
Department of Panchakarma,  
Dr. D. Y. Patil College of  
Ayurveda and Research Centre,  
Dr. D. Y. Patil Vidyapeeth  
(Deemed to be University),  
Pimpri, Pune 411018,  
Maharashtra, India.

### ABSTRACT

The management of *Netra Rogas* (Ophthalmic disorders) in *Ayurveda* involves eliminating vitiated *Doshas*, restoring *Dosha* equilibrium, and revitalizing tissues. This article explores the application of various *Basti Yogas* in managing retinal disorders, including degenerative conditions, retinal vascular diseases, and preventing recurrence of certain *Netra Rogas*. Through a review of *Ayurvedic* literature and clinical applications, *Basti Yogas* demonstrate sudden action in acute haemorrhages, relieve retinal oedema, and exhibit neuroprotective actions valuable in clinical conditions like Glaucoma and Optic Atrophy. Overall, *Basti Yogas* hold therapeutic potential in managing retinal pathologies, offering a comprehensive approach to *Ayurvedic* ophthalmology.

**KEYWORDS:** *Ayurveda*; Health-care; Ophthalmology; Retinal Pathologies.

## INTRODUCTION

*Basti Karma*, a pivotal component of *PanchaKarma*, is a multifaceted therapeutic regimen that primarily targets the pacification of *Vata Dosha*, a fundamental element governing physiological and pathological processes within the human body.<sup>[1]</sup> As *Vayu*, the vital force behind all bodily functions, plays a crucial role in maintaining health and precipitating disease. Consequently, *Basti Karma* has emerged as a cornerstone in *Ayurvedic* treatment protocols, offering a comprehensive approach to addressing *Vata*-related disorders.<sup>[2]</sup>

Contrary to the prevalent misconception that equates *Basti Karma* with enema therapy, the former is a distinct and holistic treatment modality that aims to eliminate vitiated *Doshas* (toxins) responsible for *Vata* imbalance. This nuanced understanding underscores the significance of *Basti Karma* in *Ayurvedic* medicine, where it is revered as a complete treatment paradigm incorporating various therapeutic aspects.<sup>[3]</sup>

The importance of *Basti Karma* is further underscored by its designation as the most efficacious treatment for *Vata*-related afflictions. As the "Lord" of the three *Doshas*, *Vata's* influence extends beyond mere disease causation, as it also dictates the fate of *Pitta* and *Kapha Doshas*.<sup>[4]</sup> The pathogenesis of various *Netra Rogas*, including *Vata*-dominated conditions like *Timira* and degenerative diseases, is intricately linked to *Vata's* role.<sup>[5]</sup>

Classical *Ayurvedic* texts unequivocally emphasize the paramount importance of *Basti Karma* in pacifying *Vata*-related diseases, with some authorities proclaiming it as "half of the treatment".<sup>[6]</sup> This lofty stature can be attributed to *Basti Karma's* unique ability to produce immediate effects through both *Santarpana* (Nourishing) and *Apatarpana* (Purifying) actions, mediated by judiciously selected drugs.

*Basti Karma's* versatility is reflected in its categorization into two primary types: Anorectal and non-anorectal. The former is further subdivided into *Anuvasana Basti* and *Niruha Basti*, while the latter encompasses *Uttara* and *Mutra Marga Basti*. This diversity in application underscores *Basti Karma's* adaptability in addressing a wide range of health conditions.<sup>[7]</sup>

As a *Tridoshahara Chikitsa*, *Basti Karma* is endowed with the unique property of balancing all three *Doshas*, thereby rendering it an invaluable treatment modality. In the context of *Netra Rogas*, *Basti Karma's* role is multifaceted, as it nourishes the eyes, addresses *Timira*,

*Adhimantha*, and *Vata*-dominated conditions, and offers therapeutic benefits in various other ophthalmic disorders.<sup>[8]</sup>

The critical role of *Vata* in governing anabolism, catabolism, and dormant *Pitta* and *Kapha Doshas* underscores its significance in maintaining physiological homeostasis. Consequently, *Basti Karma*, as a *Vata*-pacifying treatment, emerges as a comprehensive therapeutic approach for addressing a wide range of diseases, including those affecting the eyes.

## AIMS AND OBJECTIVES

### Primary objective

To elucidate the concept of *Basti Karma* in the context of *Drishti Rogas* (ophthalmic disorders), with a specific emphasis on its therapeutic applications in various conditions affecting the eyes.

### Secondary objectives

1. To establish the significance of various *Basti* formulations in the management of common Retinal diseases, thereby highlighting their potential as adjunctive or alternative therapeutic modalities.
2. To explore the efficacy of *Basti Karma* in addressing the complex pathophysiology of Retinal disorders, with a focus on its ability to balance the *Tridoshas* and restore ocular homeostasis.

## MATERIAL AND METHODS

A comprehensive review of *Ayurvedic* literature was conducted to gather information on the application of *Basti Yogas* in managing retinal disorders. Classical *Ayurvedic* texts, including *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridayam*, were consulted. Additionally, contemporary research articles and case studies published in peer-reviewed journals were analysed.

### Importance of *basti* as *chakshushya rasayan*

*Basti*, a pivotal therapeutic procedure in *Panchakarma*, is esteemed as the cornerstone of *Ayurvedic* treatment modalities, encompassing half of all therapeutic measures. As *Vata Dosha* plays a dominant role in governing physiological functions, its imbalance can precipitate a myriad of diseases.<sup>[9]</sup> *Pakwashaya*, the specific site of *Vata*, is directly

influenced by *Basti*, rendering it a *Vishesha Chikitsa* (specialized treatment) for *Vata*-related disorders.

*Charaka*, in his seminal text, *Sidhisthana*, underscores *Vata*'s preeminent role in causing diseases affecting the extremities (*Shakha*), gastrointestinal tract (*Koshta*), vital spots (*Marma*), and upper body parts. Moreover, *Vayu* regulates the collection and transportation of *Pitta*, *Kapha*, *Rasa*, *Rakta*, *Sweda*, *Mala*, and *Mutra*, emphasizing its critical importance in maintaining physiological homeostasis.<sup>[10]</sup>

When *Vayu* becomes aggravated, *Basti* is considered the sole remedy for its alleviation, earning its designation as half of the entire therapeutic armamentarium. *Charaka* further emphasizes *Basti*'s versatility in treating not only *Vata*-related diseases but also *Pitta* and *Kapha vikaras*, as well as conditions arising from *Rakta Samsargaja* and *Sannipatika* factors.

The therapeutic efficacy of *Basti* can be attributed to its ability to spread its *Veerya* (Potency) throughout the body via microchannels, analogous to water transportation in trees. This enables *Basti* to eradicate morbid *Doshas* from the extremities to the head, much like the sun's ability to absorb *Rasa* from the *Earth*.<sup>[11]</sup>

A comprehensive analysis of *Basti*'s indications reveals its primary application in treating ailments arising from *Vata* vitiation, which can manifest as systemic conditions involving neurological symptoms, such as *Akshepaka* (Convulsions), *Pakshaghata* (Stroke), *Ekanga Roga* (Debilitating neurological illness), and *Sarvanga Roga* (Generalized neurological disorder). The affinity of *Basti* towards nervous tissues, governed by *Vata Dosha*, underscores its potential in correcting pathological changes and promoting regeneration of nervous tissues.

The extensive classification of *Basti*, based on its site of action, dosage, and duration, facilitates the selection of the most suitable *Basti* formulation for specific therapeutic needs.

### **Therapeutic applications of *basti* in various *netra rogas***

The following *Basti* formulations have been employed in the management of diverse *Netra Rogas*, leveraging their unique pharmacological properties:

1. ***Ksheera basti***: Indicated in Retinal bleeding diseases, this *Basti* formulation harnesses the potency of *Ksheera* (milk) to mitigate vitiated *Pitta* and stabilize retinal blood vessels.<sup>[12]</sup>

2. ***Tikta ksheera basti with patoladi ghrita***: This combination has been found efficacious in addressing *Wet Age-related Macular Degeneration* (ARMD), as the *Tikta* (bitter) and *Ghrita* (ghee) components work synergistically to pacify *Pitta* and nourish the retina.
3. ***Lekhana basti***: Employed in the management of Dry ARMD, this *Basti* formulation exploits the *Lekhana* (Scraping) property to eliminate vitiated *Kapha* and restore retinal health.
4. ***Yoga Basti with Madhuyashtyadi Taila & Erandamooladi Kwatha***: This polyherbal formulation has been utilized in the treatment of Stargardt's Macular degeneration, as the combined actions of *Madhuyashtyadi Taila & Erandamooladi Kwatha* serve to nourish and protect the retina.<sup>[13]</sup>
5. ***Ksheera Basti with Vrisha Ghrita & Laksha Swarasa***: This *Basti* formulation has been employed in the management of Vitreous hemorrhage, leveraging the hemostatic properties of *Ksheera & Vrisha Ghrita* to arrest bleeding.
6. ***Madhuthailika basti***: Utilized in Neuroprotection, particularly in Glaucoma, this *Basti* formulation exploits the neuroprotective properties of *Madhuthailika* to safeguard retinal ganglion cells.
7. ***Sthiradi yapana basti***: Employed in the management of Pathological myopia, this *Basti* formulation harnesses the stabilizing properties of *Sthiradi Yapana* to arrest progressive myopia.
8. ***Brimhana basti***: This *Basti* formulation has been utilized in the treatment of *Keratoconus*, as the *Brimhana* (Nourishing) property serves to strengthen corneal tissues.
9. ***Erandamooladi yoga basti***: Employed in the management of Retinitis pigmentosa and Optic atrophy, this polyherbal formulation leverages the combined actions of *Erandamooladi* and other herbs to protect and regenerate retinal tissues.
10. ***Rookshana - Vaiswanara choorna basti***: This *Basti* formulation has been utilized in the treatment of Central serous retinopathy, exploiting the drying (*Rookshana*) property to absorb excess fluid and restore retinal health.

### **Mechanism of Action of *Basti* and its Importance in *Netra Roga Samprapthi Vighatana***

The therapeutic efficacy of *Basti* can be attributed to the absorption of its active principles through active transport and diffusion, facilitated by their water-soluble nature. *Niruha Basti* & *Anuvasana Basti*, with their distinct mechanisms of action, work synergistically to promote systemic health.

In the context of *Netra Roga Samprapthi Vighatana*, the *Acharyas* have described a generalized *Samprapthi* for all eye diseases, wherein the vitiated *Doshas*, primarily *Pitta*, propagate through the channels (*Sira*) towards the *Uttamanga* (Head), ultimately localizing in various parts of the eye. *Vata Dosha* plays a crucial role in regulating this process, and its vitiation can lead to *Pratilomagati* (Upwards movement), further exacerbating the condition.<sup>[14]</sup>

*Basti*, being a specific therapy for *Vataja Rogas*, is considered an essential component of *Netra Roga* management. Its effects are not limited to the rectum and *Samsodhana* of *Malas* (Faeces), but rather produce widespread systemic effects, influencing all three *Doshas*, *Dhatus*, and *Adhishtanas*.

*Pakwasaya*, the primary seat of *Vayu*, is directly targeted by *Basti*, which strikes at the root cause of *Vata* vitiation, thereby normalizing its function. In the management of *Apanavayu rodha* and its complications, *Basti* is considered a key therapeutic modality.<sup>[15]</sup>

The importance of *Basti* in *Netra Roga* management is further underscored by its role in addressing *Asthi Dhātu dushti*, wherein *Panchatiktaka Ksheera Basti* is particularly beneficial.<sup>[16]</sup> Analysis of these factors highlights the significance of *Basti* in maintaining ocular health and its potential to influence various structures within the eye.

*Basti* can be incorporated into the management of eye diseases in both curative and preventive aspects. In *Timira samanya chikitsa*, *Acharya Vagbhata* has mentioned *Basti* as a treatment modality.<sup>[17]</sup> In the management of *Netra Rogas*, local therapeutics (*Netra kriyakalpa*) play a vital role, and *Basti* is essential for pacifying *Vata Dosha* at its site and interrupting the pathogenesis of the disease.

## CONCLUSION

*Abhisyandha*, a fundamental concept in *Ayurvedic* ophthalmology, is considered the root cause of all eye diseases. Initially, *Abhisyandha* can be viewed as a *Samprapthi* for various *Jathrudha Rogas*, with further exposure to risk factors determining *Sthanasamsraya* (localization) in the *Netra*, *Karna*, *Nasa*, or *Shiras*. The pathological vitiation of *Doshas*, along with *Dushya*, resulting from *Achakshusya ahara and Vihara sevana*, leads to obstruction in the *Netravaha sira* (microvascular and capillary occlusions). Prolonged

obstruction causes nutritive deficiency and impaired oxygen delivery to various eye structures, particularly the posterior segment.<sup>[18]</sup>

Relieving obstruction and restoring normal functional atmosphere of the eye is achievable through *Srotosodhana* (Opening of channels of circulation) techniques like *Basti*. As *Basti* can be administered even in patients with *Agnimandya*, it serves as an emergency treatment for acutely manifesting retinal diseases, such as Central serous chorioretinopathy, vitreous haemorrhage, and Central retinal vein occlusion. Suitable *Basti* formulations also play a crucial role in various retinal pathologies and neuro-protection in progressive retinal neuropathies like glaucoma.<sup>[19]</sup>

*Vata's* regulatory role in maintaining normal functions of *Indriyas* (Sense organs) and perception of *Indriyarthas* (Objects of sense organs) underscores its significance in *Ayurvedic* ophthalmology. As *Basti* is considered the prime modality for *Vata Dosha*, it is essential to recognize that *Basti* is not merely an enema, but a highly complex, sophisticated, and systemic therapy with a wide range of therapeutic actions and indications. By acknowledging the intricacies of *Basti* and its applications in *Ayurvedic* ophthalmology, healthcare practitioners can harness its potential in addressing various eye disorders and promoting ocular health.

### Conflict-of-interest

None.

### Funding

None.

### REFERENCES

1. Shankar U. A textbook of shalakya tantra. Netra Roga. Chaukamba Visvabharati, 2018; 26: 1-3.
2. Edelhauser HF, et al. Ophthalmic Drug Delivery Systems for the Treatment of Retinal Diseases: Basic Research to Clinical Applications. Invest Ophthalmol Vis Sci, 2010; 51(11): 5406.
3. S I, Dubey AK, Gedam DS. Blindness: Indian scenario: Is really preventable? Int J Med Res Rev, 2013; 1(5): 255-60.

4. Kar PK. Principles and Practice of Pancha *Karma*. Chaukamba Sanskrit Pratishthan, 2013; 533: 5.
5. Sarma RK, Dash VB, editors. Charaka Samhita of Charaka. Sutrasthana. Chaukambha Sanskrit Series, 2017; 361: 20-8, 2.
6. Trikamji J, Ram N, editors. Susruta Samhita of Susruta. Chikitsasthana. Chaukambha Sanskrit Sansthan, 2012; 525: 35-6, 1.
7. Kunte AM, Navare KR, editors. Ashtanga Hridaya of Vagbhata. Kalpa Sthana. Chaukamba Orientalia, 2012; 4, 6, 27, 42, 6: 754, 757-758.
8. Sarma RK, Dash VB, editors. Charaka Samhita of Charaka. Sutrasthana. Chaukambha Sanskrit Series, 2017; 12: 7, 2.
9. Trikamji J, Ram N, editors. Susruta Samhita of Susruta. Sutrasthana. Chaukambha Sanskrit Sansthan, 2012; 21, 28, 1: 104-5.
10. Murthy KRS, editor. Sharangadhara Samhita of Sharangadhara. Poorvakhandam. Chaukamba Orientalia, 2003; 23: 5-23.
11. Trikamji J, Ram N, editors. Susruta Samhita of Susruta. Chikitsasthana. Chaukambha Sanskrit Sansthan, 2012; 528, 35: 25-1.
12. Khurana AK. Anatomy and Physiology of Eye. CBS Publishers & Distributors, 2017; 166: 6-3.
13. Varela-Fernandez R, Diaz-Tome V, Laces-Rodriguez A, et al. Drug delivery to the posterior segment of the eye: Biopharmaceutics and Pharmacokinetic Considerations. Pharmaceutics, 2020; 12(3): 269.
14. Kunte AM, Navare KR, editors. Ashtanga Hridaya of Vagbhata. Uttara Sthana. Chaukamba Orientalia, 2012; 804: 8-2, 6.
15. Sarma RK, Dash VB, editors. Charaka Samhita of Charaka. Sidhi Sthana. Chaukambha Sanskrit Series, 2017; 88, 1: 41-2.
16. Kunte AM, Navare KR, editors. Ashtanga Hridaya of Vagbhata. Sutrasthana. Chaukamba Orientalia, 2012; 53: 4-2.
17. Kunte AM, Navare KR, editors. Ashtanga Hridaya of Vagbhata. Uttara Sthana. Chaukamba Orientalia, 2012; 823: 13-62.
18. Trikamji J, Ram N, editors. Susruta Samhita of Susruta. Chikitsasthana, Chaukambha Sanskrit Sansthan, 2012; 25, 525: 3-1.
19. Patil V. Principles and Practice of Pancha *Karma*. Pune: Chaukambha Sanskrit Sansthan, 2015; 5: 13-414.