WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
Coden USA: WJPRAP Impact Factor 8.453
Volume 15, Issue 2, 979-988. Research Article ISSN 2277–7105

A COMPARATIVE STUDY OF *USHNA* AND *SHEETA TRIPHALA PINDI* IN THE MANAGEMENT OF EYE STRAIN – A CASE SERIES

Dr. Akshat Vashisth[1], Dr. Naveen B. S.*[2], Dr. Geethakumari B.[3], Dr. Krishnan Namboodiri[4], Dr. Laxmi M. Naik[5], Dr. Swathi A. C.[6]

[1]Final Year PG Scholar, Department of PG Studies in Shalakya Tantra, Sri Sri College of Ayurvedic Science and Research, Bengaluru.

[2]Professor and HOD, Department of PG Studies in Shalakya Tantra, Sri Sri College of Ayurvedic Science and Research, Bengaluru.

[3]Professor, Department of PG Studies in Shalakya Tantra, Sri Sri College of Ayurvedic Science and Research, Bengaluru.

[4]Associate Professor, Department of PG Studies in Shalakya Tantra, Sri Sri College of Ayurvedic Science and Research, Bengaluru.

[5,6]Assistant Professor, Department of PG Studies in Shalakya Tantra, Sri Sri College of Ayurvedic Science and Research, Bengaluru.

Article Received on 15 Dec. 2025,
Article Revised on 05 Jan. 2026,
Article Published on 16 Jan. 2026,

https://doi.org/10.5281/zenodo.18266364

***Corresponding Author**

Dr. Naveen B. S.

Professor and HOD, Department of PG Studies in Shalakya Tantra, Sri Sri College of Ayurvedic Science and Research, Bengaluru.

How to cite this Article: Dr. Akshat Vashisth[1], Dr. Naveen B. S.*[2], Dr. Geethakumari B.[3], Dr. Krishnan Namboodiri[4], Dr. Laxmi M. Naik[5], Dr. Swathi A. C.[6] (2026). A Comparative Study Of Ushna And Sheeta Triphala Pindi In The Management Of Eye Strain - A Case Series. World Journal of Pharmaceutical Research, 15(2), 979–988.

ABSTRACT

Introduction: In Ayurvedic classical texts, various *Kriyakalpa* treatments are described for managing *Netra roga*. *Pindi* is one of the *Kriyakalpa*, which involves the application of a paste made from medicated *churna*. This paste will be placed on a cloth and kept over the eyelids for a specified duration. Eye strain, often referred to as Asthenopia, presents as an individual symptom, as well as a collection of symptoms that include difficulty in focusing, transient blurred vision, a dull ache in the eyes and frontal headaches. Additionally, it may manifest with dry eyes, a burning sensation and increased tear production. **Methods:** The classical textbooks of Ayurveda do not specify the temperature characteristics of *Pindi* or categorizes it as cold or hot. In this study, 10 patients with severe eye strain and all other parameters within normal limits were recruited and divided into two groups. Group A received *Ushna Triphala*

Pindi, while Group B received *Sheeta Triphala Pindi*. The duration of the study was five days. **Results**: Hence, on comparing both procedures, *Ushna Triphala Pindi* demonstrated better clinical improvement and was statistically significant compared to *Sheeta Triphala Pindi* in this case series. **Discussion:** *Pindi* is an Ayurvedic ocular therapy that promotes eye health through transdermal absorption, improved circulation, detoxification, lubrication and muscle relaxation, helping to relieve various eye conditions. Applying *Ushna* form of *Pindi* over the eyelids effectively alleviates eye strain by addressing key physiological factors that contribute to discomfort, including muscle fatigue, poor circulation, tear film instability and ocular tension.

KEYWORDS: Asthenopia, Eye strain, *Pindi*, *Triphala*.

INTRODUCTION

Eye strain is a discomfort, weakness, or eye fatigue caused by overusing the eyes.

Eye strain is generally known as Asthenopia, where it may be associated with symptoms like transient blurred vision, dull ache in the eyes, frontal headache, dry eye, burning sensation and increased lacrimation.[1]

It is commonly seen among patients with accommodative and convergence insufficiency, refractive errors and intermittent strabismus and these symptoms usually occur following prolonged near work but may also occur after extended viewing at a distance, such as watching a film or television for a long time.[2]

In Ayurveda, various Acharyas have mentioned treatments like *Kriyakalpa* for managing eye diseases.

Pindi is one of those *Kriyakalpa* treatments. It is a therapeutic procedure where a medicated paste is kept in cotton gauze and placed over the eyelids.[3]

As per Ayurveda, symptoms of Asthenopia can be attributed to the predominance of *Tridosha* vitiation. Hence, *Triphala*, an herbal combination of *Amalaki*, *Vibhitaki* and *Haritaki*, was selected for *Pindi* in this case for its combined properties of *Chakshusya* and *Tridosha hara*.[4]

Given that there has been no specific mention of *Ushna* or *Sheeta* form of *Pindi* in Bhrihatrayes, this study endeavours to evaluate and compare the effects of Triphala Pindi conducted in both *Ushna* and *Sheeta* form in the management of eye strain.

OBJECTIVE

To compare the efficacy of *Ushna Triphala Pindi* and *Sheeta Triphala Pindi* for the management of eyestrain based on the given criteria of Eyestrain.

MATERIALS AND METHODS

A total of ten patients were selected from the outpatient department of Shalakya Tantra, based on established criteria for the evaluation of eyestrain.

According to the grading of eyestrain presented in Table No. 1, all 10 patients have been classified as experiencing severe forms of eye strain.

Table No. 1: Eye strain grading.[5]

Score	Grade	Symptoms
0	Absent	Eye Strain after more than 6 hours of screen usage.
1	Mild	Eye strain within 4 – 6 hours of screen usage.
2	Moderate	Eye strain within 2 – 4 hours of screen usage.
3	Severe	Eye strain within 2 hours of screen usage.

EXAMINATION

Out of ten patients, only two had myopia with an unaided visual acuity of 6/9 in the respective eye and 6/6 aided visual acuity. The remaining patients exhibited a normal visual presentation with a 6/6 visual acuity.

All patients tested negative for dryness based on Schirmer's test, and all other parameters were within the normal range.

TREATMENT

All 10 patients were divided into two groups based on randomisation.

- Group A: A total of 5 patients received *Ushna Triphala Pindi* for fifteen minutes each day for five days.
- Group B: A total of 5 patients received *Sheeta Triphala Pindi* for fifteen minutes each day for five days.

PROCEDURE[6]

1. Purva Karma

- Materials required for the procedure, like *Triphala Sukshma Churna*, a gauze piece, cotton and a vessel, were collected.

Preparation of the *Ushna* form of *Pindi*: A sufficient amount of *Triphala Sukshma Churna* was taken in a bowl and mixed with *Ushna Jala* to create a paste.

- **Preparation of the *Sheeta* form of *Pindi*:** A sufficient amount of *Triphala Sukshma Churna* was taken in a bowl, mixed with *Sadarana Jala*, and made into a paste.
- The patient was asked to lie down in a supine position with the head straight.

2. Pradhana Karma

- The prepared medicated paste was kept in a piece of gauze and folded into a square shape to form a *Pindi*, ensuring it covers the entire eye.
- Then, this prepared *Pindi* was kept over the eyes for a total duration of 15 minutes.
- The *Ushna Triphala Pindi* has been depicted in Figures 1 to 5.
- The *Sheeta Triphala Pindi* has been depicted in Figures 6 to 10.

Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Figure 8

Figure 9

Figure 10

3. Paschat Karma

- After 15 minutes, *Pindi* was removed, and the surface of the eyelid and the surrounding area were wiped with the help of sterile cotton dipped in *Sukoshna Jala*.
- This procedure was repeated daily for a total of 5 days.

ASSESSMENT

Assessment was made based on the given criteria of Eye Strain grading (Table No. 1) before and after treatment.

OBSERVATION

Table No. 2: Observation on symptoms of Eye Strain.									
GROUPS		**GRADE A**				**GROUP B**			
		BT	%	AT	%	BT	%	AT	%
Eye Strain	**Grade 0**	0	0	0	0	0	0	6	0
	Grade 1	0	0	5	100 %	0	0	1	20 %
	Grade 2	0	0	0	0	0	0	4	80 %
	Grade 3	5	100 %	0	0	5	100 %	0	0
BT: Before Treatment, AT: After Treatment									

RESULTS

Data were analysed using non-parametric tests due to the ordinal nature of the grading scale and small sample size. Within-group comparisons were performed using the Wilcoxon signed-rank test, and between-group comparisons were done using the Mann–Whitney U test. Descriptive statistics were expressed as medians and percentages of improvement. A p-value < 0.05 was considered statistically significant.

Table No 3: Results expressed as Median and Percentage of improvement.			
	Median BT	**Median AT**	**Improvement**
Group A	3	1	66.66 %
Group B	3	2	33.33 %
BT: Before Treatment, AT: After Treatment			

Table No 4: Results based on statistical analysis.		
	Within-Group	**Between-group after treatment.**
Group A	P value: 0.063	P value: 0.032
Group B	P value: 0.063	
P-value > 0.05 is statistically non-significant, and P-value < 0.05 is statistically significant.		

Hence, on comparing both procedures, *Ushna Triphala Pindi* demonstrated better clinical improvement and was statistically significant compared to *Sheeta Triphala Pindi* in this case series.

DISCUSSION

Pindi, an Ayurvedic ocular therapy, works through transdermal absorption, improved circulation, detoxification, lubrication and muscle relaxation to promote eye health and relieve various eye conditions.

Herbs like *Triphala* contain a diverse range of bioactive phytochemicals, including tannins, gallic acid, ellagic acid, chebulagic acid, flavonoids and ascorbic acid. These compounds exhibit strong anti-inflammatory, antioxidant and wound-healing properties. During the *Pindi* procedure, when *Triphala* paste is applied to the eyelids, these bioactive molecules initiate a well-coordinated sequence of physiological processes. The medicated paste comes into close contact with the thin and highly vascular skin of the eyelids, which enhances the absorption of its active ingredients. These compounds diffuse across the epidermal and dermal layers, reaching the superficial blood and lymphatic vessels. Once absorbed, they act locally to reduce inflammatory mediators, enhance microcirculation, and relieve muscular tension around the eyes. Antioxidants such as emblicanin A and B, along with gallic acid, help neutralise free radicals generated by excessive visual strain or prolonged screen exposure, thereby protecting ocular tissues from oxidative stress.

Amalaki has *Amla Rasa, Laghu and Ruksha Guna, Sheeta Virya,* and *Madhura Vipaka*. It primarily pacifies *Pitta Dosha* and acts through its *Rasayana, Chakshusya, Tridoshaghna* and *Varnya Karmas.*[7] These attributes soothe burning sensations, redness and inflammation associated with eye strain.

Vibhitaki possesses *Kashaya Rasa, Laghu* and *Ruksha Guna, Ushna Virya*, and *Madhura Vipaka*, making it effective in pacifying *Kapha* and *Pitta Dosha* acts through *Shothahara* and *Ropana Karma*.[8] These actions might have reduced heaviness, watering, and congestion around the eyes, while its *Ushna Virya* would have enhanced metabolism and blood circulation.

Haritaki has *Lavana Varjita Pancharasa, Laghu* and *Ruksha Guna, Ushna Virya,* and *Madhura Vipaka*. It predominantly pacifies *Vata Dosha* and acts through Rasayana, *Vata Anulomana, Srotoshodhana* and *Chakshusya Karma*.[9] *Haritaki* nourishes the *Netra* and relieves ocular fatigue through its *Karma*.

Collectively, the *Kashaya Amla Rasa, Laghu Ruksha Guna, Ushna Virya,* and *Madhura Vipaka* of *Triphala* help maintain *Tridosha*. The application of *Ushna Pindi* helps in improving local blood flow, reducing oxidative stress, and *Triphala* has properties like *Shothahara, Rasayana,* and *Chakshusya Karmas,* which rejuvenate the ocular tissues. Thus, the *Ushna Triphala Pindi* effectively relieves eye strain, diminishes inflammation, and enhances ocular strength, clarity and vitality.

Ushna form of *Pindi* acts on the key physiological factors that contribute to discomfort, including muscle fatigue, poor circulation, tear film instability and ocular tension of eyelids, effectively alleviating eye strain. The warmth helps relax the orbicularis oculi, ciliary and extraocular muscles, which often become strained due to prolonged screen use, excessive reading or intense focus. This relaxation reduces muscle spasms and tension, preventing the sensation of tightness or heaviness in the eyes.

Additionally, it will help in dilating blood vessels, improving blood flow to the eyelid and surrounding ocular structures. This increased circulation enhances the delivery of active ingredients of medicine to fatigued eye muscles while simultaneously flushing out metabolic waste products that accumulate due to prolonged strain. As a result, fatigue is reduced, and the recovery process is accelerated.[10]

Another important function of the *Ushna* form of *Pindi* application is its ability to stimulate tear production. Prolonged exposure to screens or reading can decrease blinking frequency, leading to an unstable tear film and dry-eye symptoms such as irritation, burning sensation, and a gritty sensation, which ultimately result in eye strain. Hence, *Ushna* therapy might help in activating the meibomian glands, which secrete oils that stabilise the tear film and prevent tear evaporation. As a result, it will alleviate the gritty and foreign body sensations often associated with eye strain. The soothing warmth may also activate the parasympathetic nervous system, promote relaxation and reduce stress, which further enhances eye comfort.[11]

CONCLUSION

Eye strain, often referred to as Asthenopia, is a common symptom among individuals who spend excessive time in front of screens, including office workers and college students.

In this situation, adopting a simple technique like *Ushna Pindi* will effectively reduce eye strain.

Future studies can evaluate the role of *Pindi* in eye strain, which is associated with uncorrected refractive errors and dry eyes.

DECLARATION OF PATIENT CONSENT: The patients have given their consent for his/her images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published, and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

FINANCIAL SUPPORT AND SPONSORSHIP: Nil.

CONFLICTS OF INTEREST: There are no conflicts of interest.

REFERENCES

1. Khurana AK. Comprehensive Ophthalmology. 7th ed. New Delhi: Jaypee Brothers Medical Publishers, 2021; 516.
2. Sihota R, Tandon R, editor. Parson's Disease of the Eye. 22nd ed. New Delhi: Elsevier; 2015; 87.
3. Acharya JT, editor, Sushruta Samhita of Sushruta with the Nibandhasangraha commentary of Sri Dalhanacharya, Uttaratantra; Kriyakalpa Adhyaya: Chapter 18, Verse 4. Varanasi: Choukambha Krishnadas Academy; 2021; 633.
4. Sastry JLN. Dravyaguna Vijnana Vol 2: Varanasi: Chaukhamba Orientalia, 2014; 730.
5. Shaw S. A comparative clinical study to evaluate the efficacy of Triphala choorna with Krishnadi anjana and Triphala choorna in the management of Timira w.s.r. to Senile immature cataract (MD dissertation): Bengaluru: Rajiv Gandhi University of Health Sciences, 2018; 109-110.
6. Acharya JT, editor, Sushruta Samhita of Sushruta with the Nibandhasangraha commentary of Sri Dalhanacharya, Uttaratantra; Kriyakalpa Adhyaya: Chapter 18, Verse 4. Varanasi: Choukambha Krishnadas Academy, 2021; 633.
7. Sastry JLN. Dravyaguna Vijnana Vol 2: Varanasi: Chaukhamba Orientalia; 2014; 730.
8. Sastry JLN. Dravyaguna Vijnana Vol 2: Varanasi: Chaukhamba Orientalia; 2014; 730.
9. Sastry JLN. Dravyaguna Vijnana Vol 2: Varanasi: Chaukhamba Orientalia; 2014; 730.
10. Marmarou A, et al. The relationship between cerebral blood flow and temperature. *J Neurosurg*, 1991; 75(1): S15–S23.
11. Blackie CA, Solomon JD, Scaffidi RC, Greiner JV, Lemp MA, Korb DR. The mechanism of action of warm compress therapy for meibomian gland dysfunction. *Cornea*, 2015; 34(12): 1563–1568.4.