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"EFFECT OF JEEVANTHYADI GHRITAM ASHCHOTANA IN SHUSHKAAKSHIPAK (DRY EYE DISEASE): A SINGLE CASE STUDY"

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Abstract: Background: Dry Eye Syndrome, also known as Keratoconjunctivitis Sicca, is a multifactorial disorder of the ocular surface characterized by tear film instability, hyperosmolarity, and ocular discomfort. Modern management primarily relies on artificial tear substitutes, which offer only temporary symptomatic relief. Ayurveda describes a comparable condition, Shushkakshipaka, under Sarvagata Netraroga, marked by Gharsha (irritation), Avila Darshana (blurred vision), Daha (burning sensation), and Raktharaji (congestion), caused by Vata-Pitta-Rakta vitiation. **Materials and Methods:** A 30-year-old male patient presenting with blurring of vision, burning sensation, irritation, and redness of both eyes was diagnosed with Shushkakshipaka. The patient had a history of LASIK surgery and previous use of lubricating eye drops with minimal relief. The treatment regimen included Jivantyadi Ghrita Tarpana locally for 7 days, supported with oral administration of Saptamrita Lauha (250 mg twice daily with honey) and Muktapishti (125 mg twice daily with rose water) for 15 days. Symptomatic assessment and ocular evaluation (visual acuity and IOP) were performed before and after treatment.,

Results: After completion of therapy, significant improvement was observed in dryness, burning, redness, irritation, and blurred vision. Both near and distant visual acuity returned to normal, and IOP remained within normal limits. No adverse reactions were noted during or after treatment. **Conclusion:** The combined therapy of Jivantyadi Ghrita Tarpana, Saptamrita Lauha, and Muktapishti effectively relieved the symptoms of Shushkakshipaka by pacifying Vata-Pitta Dosha, nourishing ocular tissues, and restoring tear film stability. This case highlights the potential of Ayurvedic management as a safe and holistic alternative to conventional tear substitutes in Dry Eye Syndrome.

KEYWORDS:

Dry Eye Disease, Jeevanthyadi ghrita Ashchotana, Sushkaakshipak.

INTRODUCTION:

Dry Eye Syndrome, also known as Keratoconjunctivitis Sicca, is a common ocular disorder characterized by tear film instability, hyperosmolarity, and inflammation of the ocular surface. It manifests as burning, foreign body sensation, photophobia, and visual fatigue. In contemporary ophthalmology, the condition is often linked to environmental factors, prolonged screen exposure, refractive surgeries, and autoimmune diseases. Although artificial tear substitutes and lubricants are routinely prescribed; they offer only temporary relief and fail to address the underlying cause of tear film imbalance.[1]

In Ayurveda, a similar condition is described as Shushkakshipaka, classified under Sarvagata Netraroga (diseases involving all parts of the eye). The term Shushkakshipaka is derived from "Shushka" meaning dryness and "Akshi" meaning eye, indicating a pathological dryness of the ocular surface. The symptoms include Gharsha (irritation), Avila Darshana (blurred vision), Daha (burning), Toda (pricking pain), and Raktaraji (congestion), which closely resemble those of modern Dry Eye Syndrome. Acharya Sushruta considered it a Vataja Netraroga, while Vagbhata described it as Vata-Pittaja, Sharangadhara as Vata-Raktaja, and Charaka as Raktaja Netraroga.[2]

From the Ayurvedic standpoint, the vitiation of Vata, Pitta, and Rakta leads to depletion of Rasa and Rakta Dhatus, resulting in diminished Ashru Srava (tear secretion) and subsequent ocular dryness. The disease process involves the loss of lubrication, irritation, and inflammation of ocular tissues, culminating in discomfort and impaired vision. Therefore, the line of management focuses on Vata-Pitta Shamana, Rakta-Shodhana, and Netra-Poshana through both systemic and local therapies to restore tear film integrity and ocular homeostasis.[3]

Sarvagata Netra-Rog

स्यन्दास्तु चत्वारइहोपदिष्टास्तावन्त एवेह तथाऽधिमन्थाः । शोफान्वितोऽशोफयुतश्च पाकावित्येवमेते दश सम्प्रदिष्टाः ।। ३ ।।

हताधिमन्थोऽनिलपर्ययश्च शुष्काक्षिपाकोऽन्यत एव वातः । दृष्टिस्तथाऽम्लाध्युषिता सिराणामुत्पातहर्षावपि सर्वभागाः ।।४।।

Sushkaakshipak

यत् कूणितं दारुणरुक्षवर्त्म विलोकने चाविलदर्शनं यत् । सुदारुणं यत् प्रतिबोधने च शुष्काक्षिपाकोपहतं तदक्षि॥

सु.उ. ६.२६

Ashchotana is a Bahirparimarjana Chikitsa (external therapy) where medicated liquid is instilled into the conjunctival sac.

रुज-दाह-प्रशमनं लेखनं चोभयोर्हितम् |

आश्च्योतनं निषेवेत सर्वनेत्रगदापहम् ||

(Sharangdhara Samhita, Uttara Khanda 13/1)

AIM AND OBJECTIVES:

Aim: To review the efficacy of Jeevanthyadi ghrita Ashchotana in Sushkaakshipak with special reference to Dry eye disease.

Objectives: To study Sushkaakshipak as described in Ayurvedic texts.

To correlate Sushkaakshipak with modern Dry Eye Diseases.

To evaluate therapeutic effects of Jeevanthyadi ghrita Ashchotana.

MATERIALS AND METHODS:

Study design:

An open label clinical study

Source of data:

Patient attending the Shalakyatantra OPD diagnosed with Sushkaak shipak (Dry eye disease)

Table 1: Patient Information

Particulars	Details
Name	XYZ
Age/Sex	26Yrs/Female
Occupation	Software Professional (8/10 hrs screen exposure)
Address	Ashta
Institution	LRP Ayurvedic Medical College

Table 2: Chief Complaints

Complaint	**Duration**
Rookshata	15 Days
Netra Raga	15 Days
Gharsha Toda	10 Days
Abhighata-Asahatva	15 Days
Netra Daha	10 Days
Netra Kalma	10 Days
Avil Darshana	10 Days

Table 3: Past, Family,Personal History

Parameter	**Observation**
Past Ocular History	Bilateral LASIK eye surgery 8 years ago
Systemic History	No diabetes, hypertension, or thyroid disorder
Allergic History	No known allergies
Family History	Non-contributory
Diet	Mixed, spicy, irregular
Appetite	Moderate
Bowel	Regular
Micturition	Normal
Sleep	Disturbed (screen exposure)
Habits	Prolonged digital exposure
Addiction	None

Table 4: General Examination

Parameter	**Observation**
Built	Moderate
Height	168 cm
Weight	67 kg
Pulse	76/min
Blood Pressure	118/78 mmHg
Temperature	98.4°F
Respiratory Rate	18/min
Pallor / Icterus / Cyanosis / Clubbing	Absent
Lymph Nodes	Not palpable

Table 5: Systematic Examination

System	**Findings**
Respiratory System	Normal vesicular breath sounds
Cardiovascular System	S1, S2 normal; no murmurs
Abdomen	Soft, non-tender, no organomegaly
Central Nervous System	Conscious, oriented, normal reflexes
Musculoskeletal System	No abnormality detected

Table 6: Ayurvedic Diagnosis

Particulars	Details

Disease	Shushkakshipaka (Dry Eye Syndrome)
Dosha	Vata-Pitta Pradhana
Dushya	Rasa and Rakta Dhatu
Srotas Involved	Rasavaha and Raktavaha Srotas
Srotodushti Type	Sangha and Kshaya
Roga Marga	Bahya Marga
Rogabheda	Sarvagata Netraroga

Table 7: Ocular Examination

Parameter	Before Treatment (Right eye OD)	Before Treatment (Left eye OS)	After Treatment (Right eye OD)	After Treatment (Left eye OS)
Visual Acuity (Distant)	6/9	6/9	6/6	6/6
Visual Acuity (Near)	N6	N6	N6	N6
Conjunctiva	Mild Congestion	Mild Congestion	Clear	Clear
Cornea	Dry, lustreless	Dry, lustreless	Clear & Moist	Clear & Moist
Tear Meniscus Height	Reduced	Reduced	Normal	Normal
Schirmer's Test 1 (5 min)	6mm	7mm	13mm	14mm
TBUT (Tear Break Up Time)	7 sec	8 sec	12 sec	13 sec
Fluorescein Staining	Mild Punctate	Mild Punctate	Absent	Absent
IOP (Intra Ocular Pressure)	16mmHg	17mmHg	16mmHg	16mmHg
Burning Sensation	Severe	Severe	Absent	Absent
Irritation	Moderate	Moderate	Absent	Absent
Redness	Mild-Moderate	Mild-Moderate	Absent	Absent
Blurring of Vision	Occasional	Occasional	Nil	Nil
Lacrimation	Frequent	Frequent	Rare	Rare
Corneal Staining	Present	Present	Absent	Absent
Conjunctival Congestion	Present	Present	Absent	Absent

Table 8: Treatment Plan

Medicine/Procedure	**Dose/Route**	**Duration**	**Anupama/Vehicle**	**Probable Action**
Jivantyadi Ghrita Ashchotana	Jivantyadi Ashchotana Karma (OD)	7 Days	--	Vata-Pittahara, Snigdha, Netra-Poshaka
Pathya (Advised Diet)	Cow ghee, green vegetables, hydration, screen breaks	--	--	Supportive
Apathya (Avoid)	Spicy, Dry food, Late Nights, Excessive Screen Time	--	--	Prevent Aggravation of Vata-Pitta

Table 9: Final Observation

Observation	**Outcome**
Subjective Improvement	Complete relief from burning redness, irritation, and photophobia
Objective Improvement	Tear film stability and corneal clarity restored
Visual Activity	Normal (6/6 both eyes)
IOP	Normal (16mmHg)
Adverse Events	None
Overall Result	Excellent improvement with Ayurvedic management of Shushkakshipaka

Sample Size:

A single patient diagnosed with signs and symptoms of Sushkaakshipak / dry eye disease.

DRUG:

तुलां पचेत जीवन्त्या द्रोणेऽपां पादशेषिते।

तत्ववाथे द्विगुणक्षीरं घृतप्रस्थं विपाचयेत्

॥ प्रपौण्डरीककाकोलीपिप्पलीरोध्रसैन्धवैः ।

शताह्वामधुकद्राक्षासितादारुफलत्रयैः ॥

कार्षिकैर्निशि तत्पीतं तिमिरापहरं परम्।

(अष्टाङ्गहृदय, उत्तरस्थान, अध्याय 13/2-4)

Used a GMP-approved drug for the clinical trials.

Reference:

Ashtanga Hrudayam Uttarasthana 1/2-3 Sahasrayoga Ghrita Yoga

Prakarana.

Table 10: Laboratory Investigation

Investigations	Normal Range	Before Treatment	After Treatment
Hemoglobin (Hb%)	13–17 g/dL	13.4 g/dL	13.8 g/dL
Total Leukocyte Count (TLC)	4,000–10,000 /cmm	7,200 /cmm	6,800 /cmm
Differential Count (N/L/E/M/B)	N: 40–75%, L: 20–45%, E: 1–6%, M: 2–10%, B: 0–1%	N: 64%, L: 29%, E: 3%, M: 4%, B: 0%	N: 60%, L: 33%, E: 3%, M: 4%, B: 0%
Erythrocyte Sedimentation Rate (ESR)	0–15 mm/hr	18 mm/hr	12 mm/hr
Random Blood Sugar (RBS)	70–140 mg/dL	112 mg/dL	108 mg/dL
Blood Urea	15–40 mg/dL	28 mg/dL	27 mg/dL
Serum Creatinine	0.6–1.2 mg/dL	0.8 mg/dL	0.8 mg/dL
Total Cholesterol	<200 mg/dL	182 mg/dL	179 mg/dL
SGOT / SGPT	<40 U/L	32 / 29 U/L	30 / 28 U/L
Thyroid Profile (TSH)	0.4–4.5 µIU/mL	2.1 µIU/mL	2.0 µIU/mL
Rheumatoid Factor (RA Test)	Negative	Negative	Negative
Antinuclear Antibody (ANA Test)	Negative	Negative	Negative
C-Reactive Protein (CRP)	<6 mg/L	5 mg/L	3 mg/L
Tear Osmolarity	275–295 mOsm/L	315 mOsm/L	290 mOsm/L

Method of Application:

Materials and Methods

Procedure of Ashchotana [10]

1.Poorva karma's: -According to Videha, Laghu Bhojana (light diet) is recommended during the initial three days of the Tivra Avastha, when the clinical manifestations are severe. After the subsidence of symptoms and attainment of Parva Avastha normal diet may be gradually

reintroduced.

Selection of ocular therapeutic procedures is based on Doṣa-Bala, as follows:

* In Alpa Bala Doṣa, Ascyotana is indicated.

* In Prabala Doṣa, Parisheka is advised.Laghu Bhojan (light diet)

2. Pradhana Karma’s:

The patient should be lying down in supine position comfortably. The lid are opened With the help of index finger and thumb of left hand and the drops are instilled by Right hand. The prepared medicine is instilled in Kaneenaka sandhi from appropriate Height of 1-2inches.

3.Paschat Karma:

The excessive drops outside the eye should be cleaned, then fomentation (Swedana Karma) is done by gauze soaked in lukewarm water. In Kapha and Vata predominant patients the Swedana karma should be done.

The diagnosis is established based on the presence of the Vata-Pitta predominant symptoms described in the classical texts (Sushruta Samhita):

1)Daruna-Rookshata (Severe Dryness): The cardinal sign where the eye loses its natural Sneha (gloss/moisture).

2)Kunita/Vartma-Stambha (Difficulty in opening lids): A feeling of stiffness in the eyelids, especially upon waking.

3)Gharsha & Toda (Gritty Sensation & Pricking Pain): Constant irritation as if sand is present in the eye, resulting from the loss of the protective tear film.

4)Abhighata-Asahatva (Photophobia/Irritation): Extreme sensitivity to wind and light due to the exposed corneal nerves.

These symptoms are similar to Dry Eye Disease in modern medicine.

1. Aqueous Deficiency: Lack of adequate Tarpaka Kapha (lubricating fluid).

2. Evaporative Loss: Weakness in the Agni (metabolism) of the Meibomian glands.

3. Ocular Surface Inflammation: Hyperosmolarity leading to epithelial damage. Ashchotana (eye drops therapy) is indicated in such inflammatory and degenerative conditions.

Ashchotana (medicated eye drops) is the first line of "Kriya Kalpa" (topical procedures) for Sushkaakshipak. For this condition, the methodology focuses

on Snehana (oleation) to counteract the Rooksha (dry) quality.

OBSERVATION:

	Before t/t	After t/t
Dryness (Rookshata)	+++	-
Netra Raga (Redness)	++	-
Gharsha Toda (FB sensation)	+++	+
Abhighata-Asahatva	+++	++
Netra Daha (Burning)	+++	-
Netra kalma (Eye strain)	+++	-
Avil Darshana (Blurred vision)	++	-

Significant reduction in Dryness.
Marked decrease in roughness and irritability.
Decreased in aavil Darshana, Lalima.
Decreased in Netra Daha.
No adverse reactions observed.

MODE OF ACTION:

The formulation works by creating a stable lipid film over the corneal surface, preventing tear evaporation and nourishing the deeper ocular tissues and local absorption in the conjunctival mucosa. Jeevanthyadi ghrita acts as a Chakshushya (eye tonic), providing rejuvenation to the ocular tissues and reducing oxidative stress.

* Local Absorption: Unlike oral medications that must undergo systemic metabolism, Ashchotana allows for direct absorption through the conjunctival mucosa. This ensures a high bioavailability of active polyphenols and tannins directly at the site of inflammation.

* Rejuvenation: As a Rasayana, it promotes the repair of micro-trauma on the conjunctival surface, acting as a tonic that restores the physiological health of the eye.

1)Lipid Layer Restoration: Sushkaakshipaka involves a deficiency in the protective tear film. The Ghrita base provides external lipids that integrate with the lipid layer of the tear film, significantly reducing evaporation and providing immediate relief from "Seka" (burning sensation) and "Rookshata" (dryness).

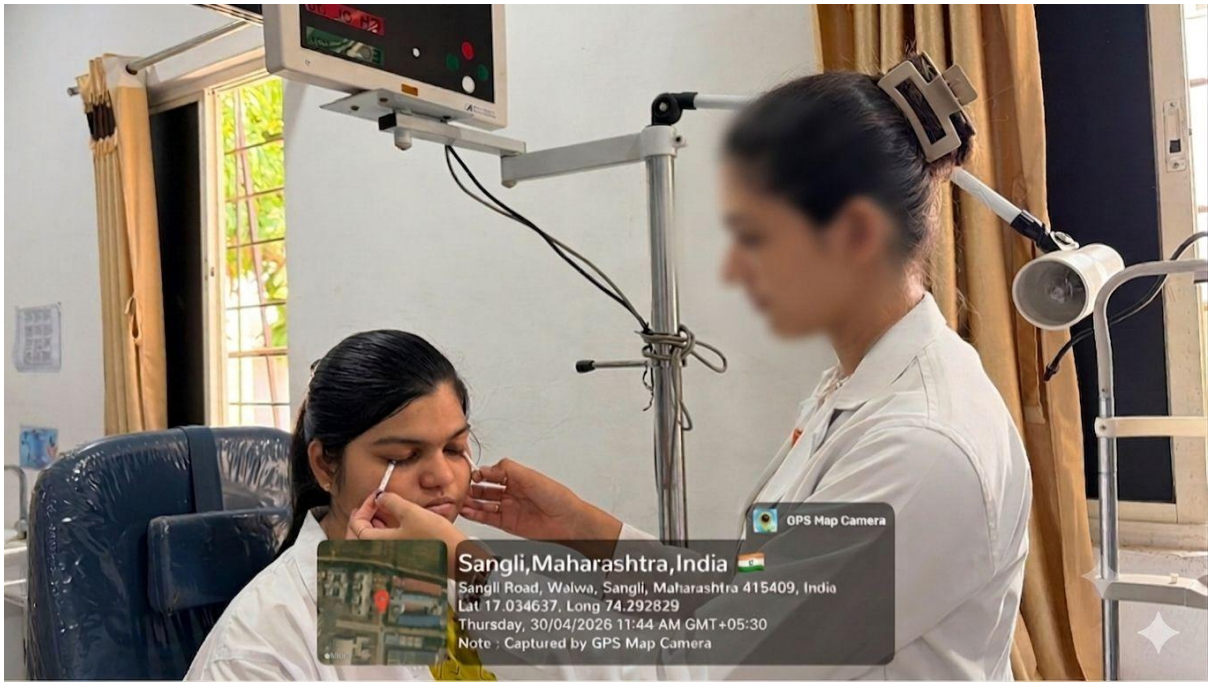
2)Vata-Pitta Shamana: The ingredients in Jeevanthyadi Ghrita (such as Jeevanti, Yashtimadhu, and Cow’s Ghrita) possess Sheeta (cooling) and Snigdha (unctuous) properties. These directly neutralize the Rooksha (dry) and Khara (rough) qualities of Vata that lead to corneal epithelial erosions.

3)Tarpana (Nutritive Saturation): Unlike aqueous drops that wash away quickly, the medicated Ghrita has higher viscosity and mucoadhesive properties. This ensures prolonged contact time with the conjunctival and corneal epithelium, allowing the Jeevaniya (life-giving/pro-regenerative) herbs to promote the healing of micro-lesions and restore the goblet cell function.

Photos:

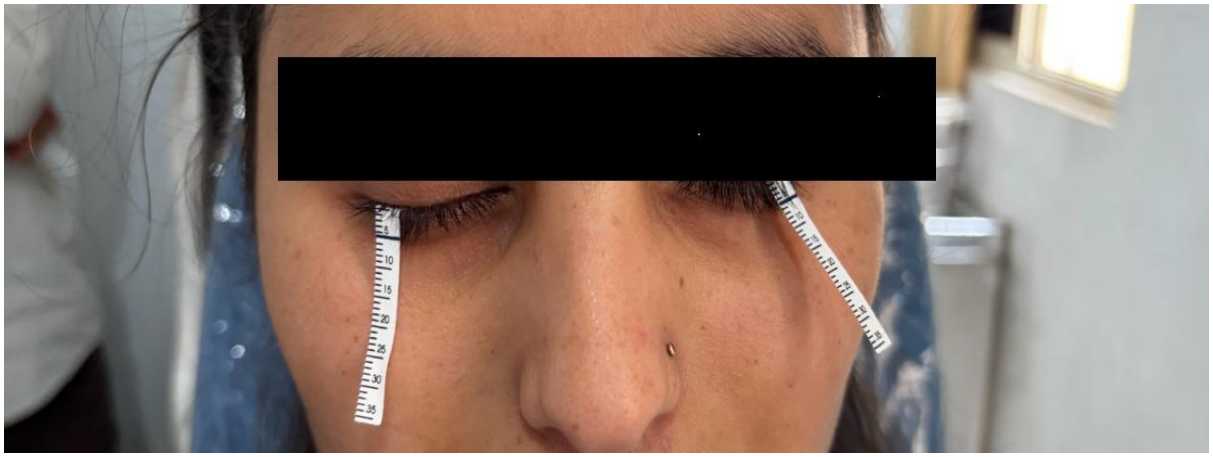
Before Treatmenty

After Treatment

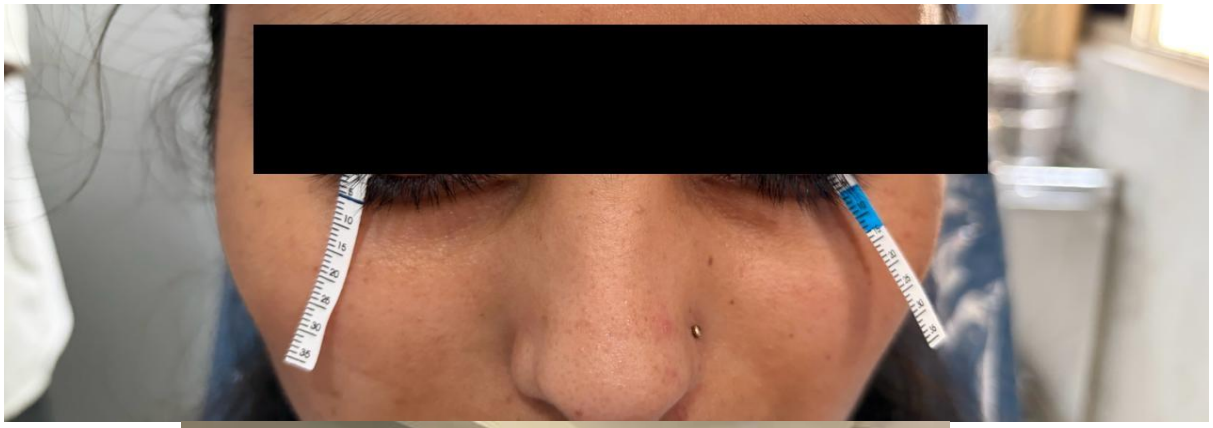


Schrime test:

Before Treatment:



After Treatment:

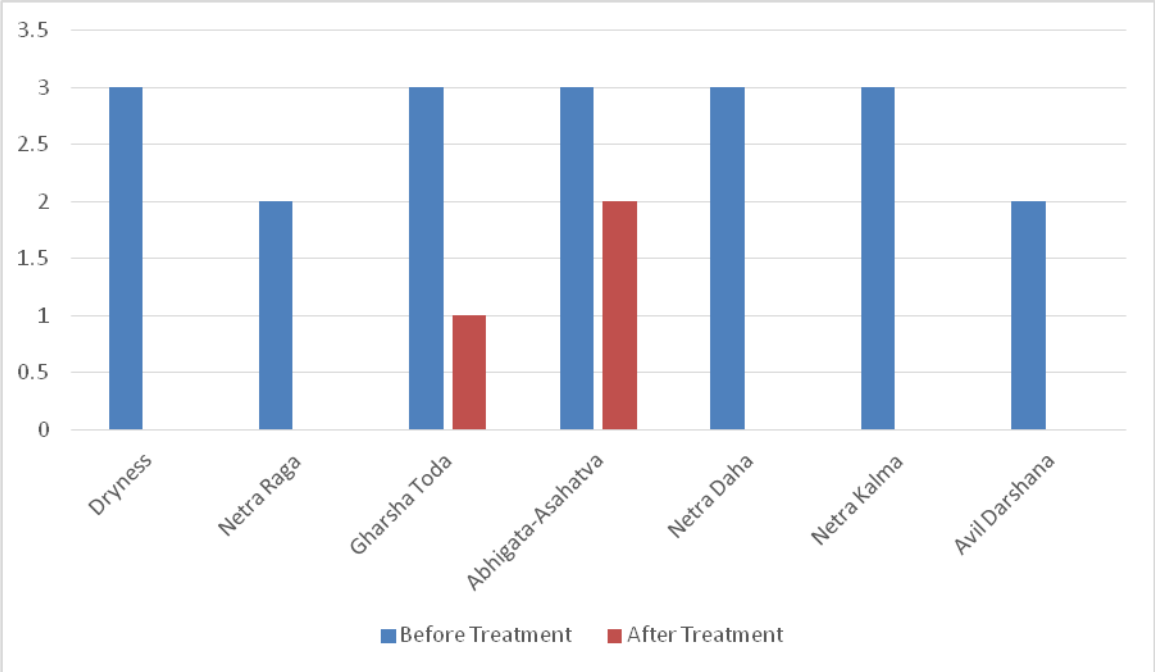


RESULTS:

26-year-old female patient diagnosed with Dry Eye Disease on clinical presentation was advised with Jeevanthyadi ghrita Ashchotana for seven days. The signs and symptoms were reduced to a mild degree, proving effective based on clinical assessment.

Jeevanthyadi ghrita Ashchotana showed statistically significant improvement in:

1. Reduction in ocular irritation and grittiness.
2. Improvement in tear film stability.
3. Complete relief of Netra Daha (burning sensation).
4. Patient feels better.



DISCUSSION:

In this present case study, the clinical features such as dryness, irritation, redness, and burning sensation of the eyes corresponded closely to the condition described as Shushkakshipaka in Ayurvedic classics. According to Sushruta Samhita, Shushkakshipaka is a Vataja Netraroga, while Vagbhata and Charaka have described Pitta and Rakta involvement respectively. The patient's occupational history of prolonged screen exposure, prior LASIK surgery, and irregular lifestyle acted as Vata-Pitta Prakopaka Nidana. Hence, the pathogenesis involved Vata-Pitta vitiation leading to Rasa-Rakta Kshaya, resulting in Ashru Kshaya (tear deficiency) and ocular surface inflammation. This supports the Ayurvedic view that tear film disturbance is not merely a local defect but a manifestation of Dosha-Dhatu Vaishamya.

Jivantyadi Ghrita ashchotana served as the main local therapy, providing direct lubrication, nourishment, and cooling effects on the ocular tissues. Being Snigdha, Sheeta, and Tridoshahara, the Ghrita improved Ashru Srava (tear secretion) and restored the Sneha Bhava of Rasa Dhatu. The ghee-based medium facilitated deeper tissue penetration, enhanced ocular surface healing, and reduced inflammation. Its content herbs such as Jivanti, Yashtimadhu, and

Haridra possess Vranaropana and Shothahara properties, which helped in repairing the corneal epithelium and stabilizing the tear film.

After treatment, both subjective and objective improvements were observed — Schirmer's test and TBUT values significantly improved, indicating restored tear secretion and stability. The reduction in ESR, CRP, and tear osmolarity confirmed decreased ocular inflammation and normalized tear composition. The holistic approach not only relieved symptoms but also addressed the root cause of the disease. Hence, this case demonstrates that Ayurvedic therapies, when applied with proper Dosha-Dhatu assessment, can provide effective, safe, and sustainable management in Dry Eye Syndrome (Shushkakshipaka), which remains inadequately managed by modern tear substitutes.

CONCLUSION:

In this present case study, the Ayurvedic management of Shushkakshipaka (Dry Eye Syndrome) through Jivantyadi Ghrita ashchotana produced remarkable clinical improvement in parameters. The therapy effectively alleviated symptoms such as burning, redness, irritation, and blurring of vision, while restoring normal tear secretion and tear film stability without any adverse effects. The results indicate that Vata-Pitta Shamana and Rasa-Rakta Dhatu Poshana plays a key role in re-establishing ocular homeostasis. This case highlights that Ayurveda, with its holistic and root-cause-oriented approach, offers a safe, effective, and sustainable alternative to conventional tear substitutes in the management of Shushkakshipaka (Dry Eye Syndrome).

REFERENCE:

1. Sushruta. Sushruta Samhita with Nibandhasangraha Commentary by Dalhana. Uttara Tantra – Netraroga Vigyana Adhyaya 7/7-10. Varanasi: Chaukhambha Sanskrit Sansthan; 2018. p. 584-586.

2. Vagbhata. Ashtanga Hridaya with Sarvanga Sundara and Ayurveda Rasayana Commentaries. Uttara Sthana 13/1-3. Varanasi: Chaukhambha Kṛishnadas Academy; 2020. p. 742-744.

3. Charaka. Charaka Samhita with Ayurveda Dipika Commentary by Chakrapani. Chikitsa Sthana 26/210-215. Varanasi: Chaukhambha Bharti Academy; 2019. p. 640-642.

4. Sushruta Samhita. Uttara Tantra, Chapter 1-19 (Netra Roga). English translation by P.V. Sharma. Varanasi: Chaukhambha Visvabharati; Reprint Edition.

5. Ashtanga Sangraha of Vagbhata. Uttara Tantra, Netra Roga Chikitsa. Translated by Prof. K.R. Srikantha Murthy. Varanasi: Chaukhambha Orientalia; Reprint Edition.

6. Sarangadhara Samhita. Uttarakhanda, Chapter 13 (Netra Prasadana Karma). Translated by P. Himasagara Chandra Murthy. Varanasi: Chowkhamba Sanskrit Series Office; Reprint Edition.

7. Bhavaprakasha of Bhava Mishra. Purva Khanda, Mishraka Prakarana (Triphala Vijnana). English commentary by Bulusu Sitaram. Varanasi: Chaukhambha Orientalia; Reprint Edition.

8.Khurana AK, Khurana I. Anatomy and Physiology of Eye. 3rd ed. New Delhi: CBS Publishers & Distributors; Latest Edition.

9.Journal of Ayurveda and Integrative Medicine. Clinical efficacy of Triphala eye drops in Management of Dry Eye Syndrome. [Relevant Peer-Reviewed Journal Reference].

10.Dravyaguna Vijnana. Vol-2. (Pharmacognosy of Triphala: Terminalia chebula, Terminalia bellirica, Phyllanthus emblica). By P.V. Sharma. Varanasi: Chaukhambha Bharati Academy; Reprint Edition.

11.Sarvagata Netra -Rog -- Sushruta Samhita. Uttara Tantra, Chapter 6 Hindi Translation by Dr. Anant Ram Sharma, Varanasi: Chaukhambha Sur-Bharati Prakashan Pg. no. 43; Reprint Edition.