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CASE REPORT ON AYURVEDIC MANAGEMENT OF SHUSHKAKSHIPAKA WITH SPECIAL REFERENCE TO DRY EYE DISEASE

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ABSTRACT

Dry Eye Disease (DED) is a multifactorial ocular surface disorder characterized by tear film instability, hyperosmolarity, inflammation, and neurosensory abnormalities. This case report highlights the Ayurvedic management of Mixed Dry Eye Disease, diagnosed as *Shushkakshipaka* in Ayurveda, which aligns with *Vata-Pitta* predominant ocular pathology. A 50-year-old male presented with symptoms of dryness, grittiness, photophobia, and intermittent blurred vision, confirmed through reduced Schirmer's and TBUT values and mild meibomian gland dysfunction. The treatment protocol integrated Ayurvedic therapies: *Seka* with medicated milk for reducing inflammation, *Vartma Pratisarana*to relieve meibomian gland plugging, *Snehapana* with *Jeevanthyadi Ghrita*, *Virechana* using *Trivrit Lehya*, and *Tarpana* to nourish ocular tissues. Post-treatment evaluations revealed significant clinical improvement: Schirmer's increased to 25 mm and TBUT to 20s, alongside resolution of ocular symptoms and surface abnormalities. This case demonstrates the therapeutic potential of a structured Ayurvedic regimen in treating both aqueous-deficient and evaporative forms of DED. It also underscores the value of individualized, dosha-based interventions supported by modern diagnostics. The integration of lifestyle modifications further enhanced long-term outcomes. This report suggests Ayurveda can provide a holistic and effective approach to chronic ocular surface disorders.

KEYWORDS: Shushkakshipaka, Dry eye disease, Meibography, Tarpana.

INTRODUCTION

Dry eye is a multifactorial disease of the ocular surface which is characterized by a loss of homeostasis of the tear film, and accompanied by ocular symptoms, in which tear film instability and hyperosmolarity, ocular surface inflammation and damage, and neurosensory abnormalities play etiologic roles. [1] According to the etiological classification the causes of dry eye disease can be classified as Aqueous deficiency dry eye also known as Keratoconjunctivitis sicca and Evaporative dry eye which decrease tear film stability and thus increase evaporation. [2]

Inflammation in the conjunctiva and accessory glands is present in 80% of the patients with KCS and may be the cause and consequence of dry eye, amplifying and perpetuating disease. [3] The most common symptoms are feeling of dryness, grittiness and burning associated with stringy discharge, transient blurring of vision, redness and crusting of the lids are also common. Examination of the eyes may show changes in the conjunctiva like redness, tear film may shows changes like increased evaporation, instability etc, and cornea may show epithelial erosions. Complications in very severe cases

include peripheral superficial corneal neovascularisation, epithelial break down, melting and perforation and bacterial keratitis. [4]

According to the Ayurvedic textbooks, the condition can be corelated as *Shushkakshipaka*. *Acharya Susrutha* considers it as a *Vata* predominant condition which is characterised by *Daruna Ruksha Vartma* (lids are stiff and dry), *Avila Darshana* (blurred vision) etc. [5] *Acharya Vagbhata* has considered it as a *Vata-Paittika* condition which is characterised by *Gharsha* (grittiness), *Thoda*(pain), dry and hard eyelids and difficulty in opening and closing to the eyes. [6]

Contemporary treatment of dry eye disease includes artificial tears; anti-inflammatory eye drops and management of Meibomian gland dysfunction through warm compresses and lid hygiene. In moderate to severe cases, therapies like punctal plugs, autologous serum eye drops, and scleral lenses may be used. Ayurvedic treatment should include *Vata* and *Pitta* alleviating measures. *Kriyakalpa* including *Tarpana* and *Putapaka* with *Snigdha Dravya*, *Anjana* like *Keshanjana* etc can be adopted.

Apart from these treatment modalities, appropriate lifestyle modifications should be made and any other systemic underlying cause if present should be addressed and managed.

METHOD OF STUDY - CASE REPORT Presenting Illness

A 50 year old male complaints of feeling of dryness and grittiness in the eyes which is associated with intermittent blurring of vision and redness of eyes since 2 months.

History of present illness

The patient, who is an engineer by profession, was not suffering from the complaints previously. From the past 8 months, he started experiencing a feeling of dryness in his eyes bilaterally which was associated with mild burning sensation and itching initially. He neglected the

condition at the beginning but later he started noticing mild redness in his eyes. The discomfort worsened and he started experiencing episodes of blurred vision. The condition aggravated on prolonged visual tasks and longer hours of screen time and also during exposure to air-conditioned environment. He consulted ophthalmologist and was advised to use eye drops (details unknown), by which he got relief. From the past 2 months, the condition re appeared with more intensity, and was associated with pain in and around the eyes and increased ocular fatigue. The discomfort began interfering with his professional activities, leading to a noticeable reduction in productivity. photophobia and persistent ocular discomfort made him to seek further evaluation from Shalakva Tantra OPD of Sri Kalabyraveswara Swamy Ayurvedic Medical College, Hospital and Research Centre, Bengaluru.

Examination

Visual Acuity

	Distant Vision (Without aid)	Distant vision (With aid)	Near Vision (Without aid)	Near vision (With aid)
Both eye	6/18	6/6	N8 (P)	N6
Right eye	6/18	6/6	N10	N6
Left eye	6/24 (P)	6/6	N10	N6

Slit lamp bio microscopy

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SL No		Right eye	Left eye		
1.	Lid margin	Plugs present on the lower lid margin over the meibomian gland opening	Mild swelling present		
2.	Palpebral conjunctiva	Marked congestion	Marked congestion		
3.	Bulbar conjunctiva	Mild conjunctival xerosis	Mild conjunctival xerosis		
4.	Cornea	Clear	Clear		
5.	Anterior chamber	Normal	Normal		
6.	Iris	Normal	Normal		
7.	Pupil	RRR	RRR		
8.	Lens	Normal	Normal		

TEST	Right Eye	Left Eye
Schirmer's test	5 mm	6mm
TBUT Test	7s	7s

• Meibography(Lipi View) report showed grade 1 gland dropout in both eyes. Mild gland tortuosity and obstruction was also present in both eyes.

Diagnosis

From the above findings the final diagnosis was made as Mixed Dry Eye Disease – Predominantly Evaporative Dry Eye with mild Aqueous Tear Deficiency. The ayurvedic diagnosis can be made as *Shushkakshipaka*.

Treatment

DATE	TREATMENT GIVEN	DRUG & DOSAGE
14/9/2024 - 20/9/2024	Vartma Pratisarana	Triphala Rasakriya
14/9/2024 - 20/9/2024	Seka	Ksheera processed with Darvi & Shunthi
18/9/2024 - 20/9/2024	Amapachana	Chitrakadi Vati 1-0-1 before food
21/9/2024-23/9/2024	Snehapana	Jeevanthyadi Ghrita
24/9/2024-26/9/2024	Sarvanga Abhyanga followed by Bashpa Sweda	Murchita Tila Taila
27/9/2024	Virechana	Trivrit Lehya – 60 g
28/9/2024 - 4/10/2024	Samsarjana Krama was advised	

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10/9/2024 - 16/10/2024	Tarpana	Jeevanthyadi Ghrita
18/11/2024 - 24/11/2024	2 nd sitting of <i>Tarpana</i>	Jeevanthyadi Ghrita

Follow up

- *Pratimarsha nasya* with *Anu Taila* 2 drops to each nostril once daily in the morning.
- Aschyotana with Jeevanthyadi ghrita.

• Sapthamrutha loha 2 tablet at bed time with 1 teaspoon of Jeevanthyadi ghrita and ½ teaspoon of honey.

OBSERVATION

Assessment Before And After Treatment

PARAMETERS/ OBSERVATIONS	BEFORE TREATMENT		AFTER TREATMENT	
	OD	OS	OD	OS
Pain in and around the eyes	Present	Present	Absent	Absent
Feeling of dryness and grittiness	Present	Present	Absent	Absent
Swelling on lid margins	Absent	Present	Absent	Absent
Plugging on the lid margin	Present	Absent	Absent	Absent
Congestion in palpebral conjunctiva	Present	Present	Absent	Absent
Conjunctival xerosis	Present	Present	Reduced	Reduced

TESTS	BEFORE TREATMENT		AFTER TREATMENT	
	OD	os	OD	OS
Schirmer's test	5mm	6mm	25mm	25mm
TBUT Test	7s	7s	20s	20s

DISCUSSION

Dry eye disease is one among the common ocular disease which can cause considerable discomfort to the patient. If timely diagnosis and proper management is not done, it can lead to long term complications including corneal epithelial breakdown, punctate keratitis, corneal ulcers and in severe cases can cause visual impairments. The disease can cause an increased risk of infections and a reduction in quality of life.

In this case, a 50-year-old man presented with classic symptoms of dry eye disease including ocular dryness, grittiness, intermittent blurred vision, redness, and photophobia. The patient was an engineer by profession and this demanded long hours of exposure to computer screen. This would have resulted in reduced blinking and would have been a contributing factor for the development of the condition. Considering the slit lamp examination findings mild degree of meibomian gland dysfunction is seen which could also be taken as a contributing factor for the pathogenesis. The patient had constant exposure to air conditioner in his workspace which has evidently caused an aggravation to the symptoms. The condition can be diagnosed as Shushkakashipaka according to ayurveda wherein symptoms like Gharsha (grittiness), Thoda(pain), Rukshata (dryness), were present.

The initial phase of treatment, *Seka* was done which was focused on alleviating *Aama Lakshanas*, such as ocular pain and redness, to reduce inflammation and prepare the body for further therapeutic interventions. Since it is a *Vata-Paittika* condition, *Seka* with *Ksheera* processed with *Darvi* and *Shunti* can beneficial in pacifying the predominant *Doshas*. Slit lamp examination revealed the

presence of plugging over the lid margin of lower eyelid. *Vartma Pratisarana*, with *Triphaladi Rasakriya* involves gentle rubbing or scrubbing of the eyelid margins, was employed to help dislodge meibomian gland plugs, remove debris or casts, and improve glandular secretion, thereby supporting tear film stability and alleviating symptoms of evaporative dry eye.

The disease is said to be *Vata-Pitta* predominant according to *Acharya Vagbhata*, so the choice of *Shodhana* therapy was *Virechana*. *Trivrit Lehya* was chosen for *Virechana* owing to its distinct *Pittahara* (*Pitta*-pacifying) properties. *Jeevanthyadi Ghrita* contains drugs which are *Madhura Rasa* and *Sheeta Veerya* which pacifies *Vata* and *Pitta Doshas* and provide nourishment to the eye.

While explaining the indications of *Tarpana*, *Acharya* includes *Vishushkatha* and *Rukshata* of eyes. [10] *Acharya Dalhana* explains *Vishushkatha* as *Ashru Rahita* which can be considered as aqueous deficiency and *Rukshata* as *Asnigdhata* which can be considered as lipid deficiency which is a major contributor to evaporative dry eye disease. [11] Given the diagnosis of Mixed Dry Eye Disease, *Tarpana* emerges as the most appropriate *Kriyakalpa*, as it effectively nourishes and revitalizes both the aqueous and lipid components of the tear film. As Dry Eye Disease primarily affects the ocular surface, *Tarpana* is particularly beneficial, as it ensures direct and prolonged contact of the medicated substance with the ocular tissues, thereby enhancing both absorption and therapeutic efficacy.

Nasya with Anutaila has been mentioned while explaining the *Chikitsa* of *Shushkakshipaka*. Here *Pratimarsha Nasya* was done with *Anutaila*.

Lifestyle modifications play a major role in managing Dry Eye Disease. Patient was advised to reduce screen time, take regular blinking breaks during visual tasks, and avoid prolonged exposure to air-conditioned or windy environments. Maintaining adequate hydration, using protective eyewear outdoors, and intake of proper diet was also advised.

CONCLUSION

This case report demonstrates the successful use of Ayurvedic principles and treatments in managing Mixed Dry Eye Disease. A structured therapeutic regimen including Seka, Vartma Pratisarana, Snehapana, Virechana, and Tarpana with Jeevanthyadi Ghritaresulted in notable improvements in both clinical symptoms and diagnostic indicators such as Schirmer's and TBUT scores. By addressing both aqueous and lipid layer deficiencies, the treatment helped re-establish tear film stability and alleviate ocular surface inflammation. Incorporation of lifestyle modifications played a key role in maintaining long-term symptom relief and reducing the likelihood of recurrence. The case exemplifies how individualized Ayurvedic approaches, grounded in Dosha understanding and supported by modern diagnostics, can be effectively employed in the management of chronic ocular surface diseases.

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