



Case Study

## AYURVEDIC MANAGEMENT OF DRY EYE

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### ABSTRACT

Dry eye is a multifactorial illness of the tears and ocular surface, dry eye causes pain, disruptions to vision, instability in the tear film, and maybe even damage to the ocular surface. Tear secretion gives the corneal epithelium oxygen and continuously lubricates and moisturises the ocular surface. Dry eyes result from a disruption in regular tear production. Local, systematic and environmental factors play a major role in pathogenesis. Often exacerbated by smoke, wind, heat, low humidity or prolonged use of the eye. One of the most common disorders affecting the eyes is dry eye, affecting millions of people globally. The worldwide prevalence ranges from 5% to 50%, depending on the geographic region, Prevalence rate in India is higher than the global prevalence and ranges from 18.4% to 54.3%. *Shushkaksipaka* is one among *Sarvagata netra rogas* disease affecting all parts of the eye can be symptomatically correlated with dry eye. *Vata* and *Pitta* vitiation as per Ayurvedic view point are the major contributing pathological factor in its manifestation. This is a single case study of *Shushkakshipaka* treated with *Deepana, Pachana, Kosta Shodhana*, followed by 2 sittings of *Ksheera Saindhava Prakshalana* and *Suntyadi Anjana* and *Anu taila Pratimarsha Nasya*. At the end of the study improvement in foreign body sensation and itching. Patient got very significant result is being discussed here.


### INTRODUCTION

Dry eye is not a disease entity, but a symptom complex occurring as a sequela to deficiency or abnormalities of the tear film<sup>[1]</sup>. One of the causes of Dry Eye is excessive use of computer and Visual Display Terminal (VDT). Prolonged use of these devices leads to many complications. Prolonged use of Visual Display Terminal (VDT) make reduced blinking, exposes the eye surface to environment for more than normal time. Thus, the tear film gets evaporated which leads to dry eye. Commonly found in menopausal and post menopausal women.

Dry eye is characterized by symptoms like dry eyes, eye strain, burning sensation in eyes, foreign body sensation or gritty sensation in the eyes, itching in eyes, headache, paradoxical tearing, mildly to

moderately decreased vision, ropy mucus discharge. According to signs and symptoms in Ayurveda it can be correlated with *Shushkakshipaka*. *Shushkakshipaka* is mentioned under *Sarvagata Netra Rogas*. As per Ayurveda *Vata*, and *Pitta* vitiation in *Shushkakshipaka* is the basic pathology<sup>[2]</sup>. *Sarangadhara* considered this as *Vata raktaja*<sup>[3]</sup>.

*Shushkashipaka* is a disease which is characterized by the *Paka* of *Akshi* (eye) due to *Sushkata* caused by altered coherence of *Ashru* with ocular surface or lack of *Ashru*. According to Ayurveda, dry eye is not merely an ocular surface disorder, rather this is one of manifestation of the deranged metabolism of body tissues. *Asru* (tear film) is the byproduct of *Rasa, Meda*, and *Majja dhatu* and without normalizing/altering them we cannot treat dry eye syndrome optimally.

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<i>Vishushkata</i>	Dryness
<i>Aavila Darshanam</i>	Blurred vision
<i>Koonitam</i>	Narrowing of palpebral aperture
<i>Daruna Ruksha Vartma</i>	Hardness and roughness of eyelids
<i>Sudaruna Vata</i>	Difficulty in opening and closing

<i>pratibodhanam</i>	of eye
<i>Garshana</i>	Gritty sensation
<i>Paka</i>	Inflammation
<i>Toda and Bheda</i>	Pain
<i>Sheetchah</i>	Liking cold things
<i>Sandahayante</i>	Burning sensation

**AIM**

To evaluate the efficacy of *Suntyadi anjana* and *Ksheera saindhavadi prakshalana* in the management of *Shushkakshipaka*.

**OBJECTIVE**

To prevent dry eye complications.

To provide cost effective treatment modalities to all the patients

**MATERIALS AND METHOD****Case History**

This is a case report of A 46-year-old woman came to GAH's eye OPD of Shalakyta tantra department, Hyderabad on 04-4-2023 with chief complaints of dryness and itching sensation in both eyes since 2 years and burning and foreign body sensation since 3 months. The subject was thoroughly examined and diagnosed as *Shushkakshipaka*.

**History of Present Illness:** Patient was apparently normal 2 years back, she developed dryness and itching sensation in both eyes, left eye more than the right eye. It was insidious in onset and gradually progressive in nature.

**History of past illness:** No history of pain, redness, headache, double vision. No history of trauma,

**Ocular Examination**

	Right Eye	Left Eye
Eye brows	Normal	Normal
Eyelids	Normal	Normal
Eyelashes	Normal	Normal
Conjunctiva	Normal	Normal
Sclera	Normal	Normal
Cornea	Normal in size, shape, transparency, sheen	Normal in size, shape, transparency, sheen
Iris	Dark brown in Colour	Dark brown in colour
Pupil	Normal in size, reaction to light	Normal in size, reaction to light
Lens	Normal	Normal

**Grading and scoring will be adopted for assessing clinical feature before and after treatment**

	Criteria	Grade	Score
<b>Foreign Body Sensation</b>	Absence of foreign body sensation	Nil	0
	Foreign body sensation on/off on exposure to environmental stress	Mild	1
	Foreign body sensation frequently, with or without environmental stress	Moderate	2
	Foreign body sensation constant without environmental stress	Severe	3
<b>Dryness</b>	Absence of dryness	Nil	0
	Dryness occasional/episodic, occurs under environmental stress	Mild	1
	Dryness frequent/episodic, with or without environmental stress	Moderate	2

exposure to radiation. No h/o of DM, HTN, RA or major illness. No h/o of diseases like Sjogrens syndrome, lagophthalmos, meibomian gland dysfunction.

**Family history:** No significant family history

**Ocular History**

No H/o of using lubricating eye drops

No H/o of any ocular surgery

**Personal History**

Mixed diet

Normal appetite

Regular bowel and bladder movement

Normal sleep

*Madhyama koshtha*

*Sama agni*

**Systemic Examination**

CVS: S1, S2 heard. No murmurs

RS: B/L air entry equal, no added sounds

CNS: Conscious, well oriented to time, place and person

G.C: Moderate, afebrile

**Samprapti Ghatakas**

*Dosha - Vata and Pitta*

*Dhatu - Rasa, Meda and Majja dhatus*

*Dushya - Rakta, Ashru (tear film)*

*Srotas - Ashruvaha srotas*

*Sadhya- Sadhyatwa - Sadhya*

*Upashaya - Shita upachara*

	Dryness frequent/episodic, with or without environmental stress	Severe	3
<b>Itching</b>	Absence of itching sensation	Nil	0
	Occasional/episodic, occurs under environmental stress	Mild	1
	Frequent/episodic, with or without environmental stress	Moderate	2
	Constant without environmental stress	Severe	3
<b>Burning sensation</b>	Absence of burning sensation	Nil	0
	Occasional/episodic, occurs under environmental stress	Mild	1
	Frequent/episodic, with or without environmental stress	Moderate	2
	Constant without environmental stress	Severe	3

Treatment given	Drug Name	Duration	Dosage
Deepana, Pachana	Tab. Laghu sutha sekar ras	3 days	2 BD before food
Kosta Shodhana	Avipattikara churna	3 days	6gm bed time
Nasya	Anu taila [4]	28 days	2 drops
Anjana	Suntyadi Anjana [5]	on 1 <sup>st</sup> , 6 <sup>th</sup> , 11 <sup>th</sup> , 16 <sup>th</sup> , 21 <sup>st</sup> day	for 2 mins
prakshalana	Ksheera, Saindhava [6]	on 1 <sup>st</sup> , 6 <sup>th</sup> , 11 <sup>th</sup> , 16 <sup>th</sup> , 21 <sup>st</sup> day	for 5 mins



## RESULT AND OBSERVATION

	Before treatment	After 1 <sup>st</sup> cycle	After 2 <sup>nd</sup> cycle
Foreign body sensation	Grade - 2	Grade -1	Grade -0
Dryness	Grade - 3	Grade -2	Grade -1
Itching	Grade -1	Grade -0	Grade -0
Burning sensation	Grade -2	Grade -1	Grade -1

## Schirmer test

	Before treatment	After 1 <sup>st</sup> cycle	After 2 <sup>nd</sup> cycle
OD	5mm	7mm	8mm
OS	3mm	4mm	15mm

## DISCUSSION

**Mode of Action of Anjana:** Anjana functions as a foreign body on the surface of the eye, causing the eyes to reflexively secrete fluid in reaction to foreign objects in the cornea and conjunctiva. A large amount of drug is washed out of the eye by tears, another large percentage is drained into the nasolacrimal duct, where it can be absorbed into the systemic circulation by the nasolaryngeal and oral mucosa, and a small amount is digested by tear enzyme, *Gutika* and *Choorna* are more beneficial for Anjana, because these contain nanoparticles which are deposited in cul-de-

sac and there by increases the bioavailability to enhance the ocular absorption.

The ocular absorption of Anjana may initiate through the conjunctiva and cornea. Once it crosses the conjunctiva, the sclera is more permeable and it allows the drug to penetrate other interior structure of eye i.e., ciliary body, iris, aqueous humor, lens, vitreous humor. But due to increased vascularization of conjunctiva, ciliary body and iris, considerable amount of drug enters into the systemic circulation again.

**Mode of action of Prakshalana:** Agents that reduce the surface tension will increase the corneal wetting and thus more drugs for absorption are available. During *Prakshalana* the eyes will be asked to open and closed this will reduce the surface tension so that corneal wetting is increased. Small quantity of the drug which has high concentration is sufficient in the form of thin stream to provide more drug delivery to cornea.

**Action of Suntyadi anjana and Ksheera saindhavadi prakshalana**

Prior to *Nasya*, *Kaya shodana* is mandatory and hence *Kosta shodana* was done with *Avipattikara churna*. *Nasya* was done with *Anutaila* as it is indicated in *Shushkakshipaka*. *Anutaila* is *Brumhana* and *Tridosha hara* property. In dry eye, there will be *Srothorodha* in the secretion of tears and improper formation of layers of tear film. *Shunti* is having *Rooksha* property and *Ama pachana* in nature, so it clears *Ama* and promotes tear production from lacrimal glands. *Ghritha* is added with *shunti* to reduce the *Teekshnatha*. After *Anjana*, *Seka* with *Ksheera* and *Saindhava* will reduce *Teekshnatha*.

*Ksheera* and *Ghritha* is having *Snigdha* and *Guru guna*, *Madhura rasa*, *Sheeta virya* and *Vata pitta hara*<sup>[7]</sup>. *Nirvapana*<sup>[8]</sup> (relieves burning sensation) properties, effect is seen in symptoms like *Daha* and *Kandu*. *Ghritha* and *Ksheera* are lipophilic, so it is permeable to corneal layers and its viscous nature keep the ocular surface protected. Due to the modern life style, diseases of eyes are common, so implementing *Nasya karma* along with *Kriya kalpas* can give promising results of *Netra rogas*.

**CONCLUSION**

The eye is unique and necessary organ that is constantly exposed to the environment. In Ayurveda which are mainly treated with *Kriya kalpas*. *Kriya kalpas* has several advantages over oral administration. In the *Kriyakalpas*, the affected tissues

of the eye are targeted directly than systemic absorption and always give quick results. Various drugs can be selected according to the stage and types of the disease and procedure according to need. Thus, as we can conclude that the dry eye is a condition for which modern medicine has no treatment except for the symptomatic management; the holistic approach of Ayurvedic system of medicine provides overall relief to the patient.

**REFERENCES**

1. Comprehensive Ophthalmology by AK Khurana, published by Jaypee brothers medical publishers, New Delhi 18<sup>th</sup> Edition
2. Astanga Hrdayam: English Translation by KR Srikatha Murthy, Volume-3, Chowkhamba Krishna das Academy, Varanasi-221001, Uttara tantra 15/16-17, page no-140
3. Srivastava, Shailaja. Sharangadhara Samhita. Reprint Edition Varanasi (India); Chaukhambha Orientalia; 2016; Purvakhandha 7/170; Pg.117.
4. Astanga Hrdayam, English Translation by KR Srikatha Murthy, volume -3, Chowkhamba Krishna das Academy, Varanasi-221001, Uttara tantra 16/28, page no-147
5. Astanga Hrdayam, English Translation by KR Srikatha Murthy, Volume -3, Chowkhamba Krishna das Academy, Varanasi-221001, Uttara tantra 16/29, page no-147
6. Astanga Hrdayam, English Translation by KR Srikatha Murthy, volume -3, Chowkhamba Krishna das Academy, Varanasi-221001, Uttara tantra 16/28-29, page no-147
7. Acharya Shukla Vidyadhar, Prof. Tripathi Ravi Dutt. Caraka samhita of Agnivesa (Vol-1), Chaukhamba sanskrit pratishtan, Delhi, Ch.-27/233, pg.no.-412
8. Ganga Sahaya Pandeya, Charaka Samhita of Agnivesha with Vidyotini teeka, Varanasi, Chaukhambha Sanskrit Sansthan, 2007: 232

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