



## ROLE OF AYURVEDIC MANAGEMENT IN SHUSHKAKSHIPAKA (DRY EYE SYNDROME)

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### ABSTRACT

In today's era peoples are more depending upon the machines like computers in all sectors of life. These causes some sort of heat and radiations which certainly causes some ill effect on eyes. Environmental changes, industrialization and work stress become major issues which play an important role in health of eyes. *Ayurvedic* management specially *Tarpana*, *Nasya*, *Anjana* and internally *ghritpana* can play key role in the management of *Shushkakshipaka* (dry eye syndrome).

**KEYWORDS:** Dry eye syndrome, *Tarpana*, *Shushkakshipaka*.

### INTRODUCTION

Revolutionary effect reflected in every field including the medical science which has changed the life style. People are largely depending upon the VDT (visual display terminal). Computers are used in all field including the medical field. Over use of X-ray, UV rays, infra rays are harmful for eyes causing various disorders one of them is dry eye syndrome. Dry eye syndrome is symptom complex occurring as a sequel to deficiency or abnormality of tear film. Tear secretion provides continuous moisture and lubrication on the ocular surface to maintain comfort, corneal & conjunctival health and vision. The lacrimal gland, goblet cells and meibomian glands produce different secretions, which compositely form a layer on the eye termed as a tear film. Abnormalities of any of the components of the secretion lead to the instability of the tear film, resulting a drying of the ocular surface. *Ayurveda* describes a similar condition called *Shushkakshipaka*, which matches etymological<sup>[1]</sup> derivation and clinical picture. *Shushkakshipaka* is mentioned in the classical literature of *Ayurveda* under *vata/vata-pitta/Rakta Sarvagata Netraroga*.<sup>[2]</sup> In this condition tear substitutes are the only treatment modality with modern medical science, these only providing symptomatic relief. The preservatives present in these formulations are also a cause of dry eye.

In such a condition where the name of disease is not known *ayurveda* has given certain guidelines. As per *Acharya Charaka* have to consider the pathophysiology and predominance of *tridoshas* for the management of any disorder.<sup>[3,4]</sup> *Acharya Sushruta* has described the etiological factors common for all ocular disorders. Out of these particularly *prasakta*, *sanrodan*, *kopa*, *shoka* & *vaspagrahat*. Which are responsible for vitiation of *vata* & *pitta dosha*. *Usnabhitaptasya* may aggravate *pitta* causing dryness.<sup>[5]</sup> Anatomically eye is composed of following *panchabhautik* elements but *teja mahabhut* is predominant, different parts of the *Netra* are formed by different *mahabhutas*.<sup>[6]</sup>

### MATERIALS AND METHODS

The *panchbhautika* composition of eyes as per *ayurveda* is as follows;

Part of eye	Panchmahabhuta
<i>Mansa</i>	<i>Prithvi</i>
<i>Rakta</i>	<i>Teja</i>
<i>Krishnbhaga</i>	<i>Vayu</i>
<i>Shwetabhaga</i>	<i>Jala</i>
<i>Ashrumarga</i>	<i>Akasha</i>

In the pathogenesis of dry eye "*Ativishuskata*" & "*Rukshata*" are caused by disturbance in the *vayu*, *jala* & *akash mahabhutas* which may cause chronic inflammatory changes in the *shweta*, *akashbhaga* & *krishnbhaga* means cornea and conjunctiva.

Etiological factors as per modern science<sup>[7]</sup>

Categories	Causes
Aqueous tear deficiency	Keratoconjunctivitis sicca, sjogren syndrome, trauma to lacrimal gland, surgical removal of lacrimal gland.
Mucin deficiency	Goblet cell dysfunctions, as in hypovitaminosis A, goblet cell destruction in alkali burn, trachoma.
Lipid deficiency	Absence of meibomian glands, chronic blepharitis, chronic meibomitis
Impaired eye lid function	Bells palsy or damage to facial nerve, pterygium, ectropion, symblepharon
Drug induced	Antihistaminics, diuretics.

## DIAGNOSIS

Acharya Vagbhata has reflected more similarity with dry eye. *Shushkakshipaka* caused by vitiation of *vata* & *pitta*. Sign and symptoms are as follows.<sup>[8,9]</sup>

*Gharsha* (foreign body sensation), *toda/bheda* (pricking, tearing pain), *rukshata* (dryness in eyes), *daruna* (hardness in eyelids), *krucchounmilanimilana* (difficulty opening & closing of eyes), *vikunan/vishuskta* (drying & deficient in moisture of ocular surface). Confirmation of diagnosis depends upon sign & symptoms and *dosha* vitiation discussed in *sushruta*, *vagbhata* & other contemporary Authors of *Ayurveda*.

But tear film break up time-it is noted that after instilling a drop of fluorescein & examining in a cobalt blue light of slit lamp. Normal value range from 15 to 35 seconds. Values less than 10 seconds imply an instable tear film, schirmer1 test, rose Bengal test, tear osmolarity, tear level lactoferrine, conjunctival impression cytology.<sup>[10]</sup>

## Criteria for diagnosis

- Abnormally low schirmer test result and TFBUT.
- Objective evidence of low salivary flow.

## Management

According modern science-tear supplementation, tear retention, tear stimulation, biological tear substitutes, anti-inflammatory therapy, essential fatty acids, environmental strategies.<sup>[11]</sup>

According to *ayurveda* treatment should be directed towards the vitiated *Vata* and *Pitta dosha* which include.<sup>[12]</sup>

1. *Ghritpan-* cow *ghrita* should be given internal at night for *shaman* purpose till symptoms get reduced.
2. *Tarpan-* by melted cow *ghrita* (local treatment) or medicated with *shatavari*, *yashtimadhu* is used as per *Tarpana* procedure.
3. *Stanya Parisheka* or with *Haritaki* or *Daruharidra*.
4. *Mahaushdhi anjana*.
5. Basti should be supported by yoga bastikrama for eight days, should be supported by pitta shamak karma.
6. *Anu taila nasya*.

Particularly *Tarpana* is indicated and found to be very effective in this condition.

## DISCUSSION

In dry eye lipid layer of tear film is disturbed due to etiological factors described in *ayurveda*. Which results in reduction of tear film break up time. It leads to *daha* (burning sensation), *kandu* (itching) many studies reveals that the tear film break up time reduces due to instability of lipid & higher evaporation rate. *Ayurvedic* management like *tarpana*, *ghritpana* & *anjana* maintain the moisture of the cornea and sclera and thereby preventing corneal scarring. *Ghrita* is having *chakshusya* properties and when it is medicated with *chakshusya dravya* the result are fortified. *Ayurvedic* management has definite role in treating dry eye syndrome (*shushkakshipaka*).

## CONCLUSION

Local treatment modalities like *Tarpana*, *Anjana* with internal medication maintain the moisture of eyes which lubricates the *patalas* of eyes. *Tarpana* and *Anjana* stimulates the secretion of lacrimal as well as meibomian glands which maintain the pre corneal tear film. *Ayurvedic* management in dry eye syndrome is effective, safe without side effects. It can be used as alternative to tear supplementation.

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