

AYURVEDIC MANAGEMENT IN DRY EYE: A CASE STUDY

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ABSTRACT

Purpose: This study is designed to spread awareness about dry eye and to find out better management through *Ayurveda*. **Method:** A patient of 17 year old male was selected who reported the OPD of Shalakya Department, Patanjali Ayurvedic College, Haridwar with the symptoms of dry eye and ayurveda management was planned accordingly. **Result:** Satisfactory results were seen in symptoms of the Dry eye. **Conclusion** – Desirable outcomes attained in the dry eye symptoms by adopting *ayurveda* as line of treatment and in between 1 year of follow-up, no recurrence has been seen, whose relief percentage is quite not satisfactory in modern science.

KEYWORDS: Dry eye, *Shushka-akshipaka*, *Nasya*, *Tarpana*, etc.

INTRODUCTION

Dry eye syndrome is prevalent disease that affects visual acuity activity of daily curriculum and quality of life. The disease Dry eye, also known as Keratoconjunctivitis sicca; is the most frequent disorder in ophthalmology, caused either due to the insufficient production or due to the excessive tear evaporation- both resulting in tear hyper-osmolarity, that leads to the symptoms of discomfort or ocular damage.^[1]

The modern definition of dry eye disease is based on the concept of the three layers of the tear films.^[2] Secondary factor such as pathological changes to the eye lids, cornea or conjunctiva can themselves disturbed the normal function of the tear film. Neurotransmitter

hormones and immunological process play an important role in the regulation of the tears production by the lacrimal gland.

Symptoms of keratoconjunctivitis sicca are likely dry sensation foreign body or gritty sensation, redness, blurred vision, irritation, contact lens intolerance and mucous discharge.^[3]

A number of contributory factors affect the severity of this syndrome. These include autoimmune disease, environmental surroundings, contact lens use, hormonal changes, anatomical features, chronic inflammation, infection and iatrogenic factors such as medication or surgery. Various environmental factors like contact lens, pollution, working at video display terminals can affect the tear film.

Although at present there is no satisfactory cure for dry eye a number of therapeutic modalities are available to relieve the symptoms.^[4] Artificial tears and lubricants are main stay in the treatment of dry eye. The subjective symptoms and discomfort experienced by the patient with dry eye disease poorly correlate with objective clinical test. In *Ayurveda* the disease *Shushkakashipaka* is very similar to Dry eye syndrome in modern. All our *Acharyas* included *Shushkakashipaka* as a disease which is affecting all parts of eye ball because this condition can cause major problems to all parts of *Netra* like *Shukla*, *Krishna*, *Drishti mandalas*. *Shushkakashipaka* is described as *Vata* Disease by Sushruta^[5] *Vata Pitta* vitiated condition by *Vagbhata*^[6] and *Sharangdhara* considered this as a *Vata Raktaja*.^[7] It is also important that *Acharya Charaka* described *Akshipaka* as a disease caused by vitiated *Raktha*.^[8] After seeing all these references it is clear that vitiation of *Vata*, *Pitta* and *Raktha* will plays important role in pathology of this disease and also these are the factors which makes tear film stable.

CASE STUDY REPORT

Aim and objective of case study

To study role of ayurvedic treatment in *Shushkakashipaka* W.S.R dry eye.

TYPE OF STUDY

Observational single case design without control group.

Present illness

17 year old male pt. reported the Shalakyia OPD of Patanjali Ayurveda Hospital, Haridwar on dated 01-jan- 2017 with complaints of redness, difficulty in opening of eyes, burning sensation in both eyes, photophobia and blurred vision; since 2004, i.e., from last 12 years.

Method**In first visit**

Treatment	date	drug
Ksheer neti	1-02-2017 to 5-02-2017	Ksheer +triphala kwath
nasyam	1-02-2017 to 5-02-2017	Jeevantyadi grita
Aschotan	1-02-2017 to 5-02-2017	Durva grita
tarpan	6-02-2017 to 12-02-2017	Jeevantyadi grita
Matra vasti	6-02-2017 to 12-02-2017	k.b.t
mukhalepa	6-02-2017 to 12-02-2017	Lodhra, mulethi, rasna in dashmool kwath Lodhra, mulethi, rasna in dashmool kwath
shiropichu	6-02-2017 to 12-02-2017	k.b.t

In second visit

Treatment	Date	Drug
Ksheer neti	25-9-2017 to 29-9-2017	Ksheer +triphala kwath
nasyam	25-9-2017 to 29-9-2017	Jeevantyadi grita
Aschotan	25-9-2017 to 29-9-2017	Durva grita
tarpan	30-9-2017 to 6-10-2017	Jeevantyadi grita
Matra vasti	30-9-2017 to 6-10-2017	k.b.t
vidalak	30-9-2017 to 6-10-2017	Sariva, vatshringa, nimb patra etc
shiropichu	30-9-2017 to 6-10-2017	k.b.t

Patient discharged with the following medications given below and was advised to come for follow up after 2 months.

Sr.	Medicine	Dose	Anupana	Schedule
1.	Muktashukti bhasm Amalki rasayan Saptamrit lauh Shatavar churna Triphala churna	10 gm 100 gm 50 gm 50gm 50gm	With lukewarm water/honey	Mix all of them. Take 1TSF B.D. before meals with honey.
2.	Mahatriphaladi ghirit	200 gm	With milk	1tsp B.D after meal with milk
3.	Giloy amla juice	10 ml		Mor-eve before food

OBSERVATION AND RESULTS

S.No	C/F	Before Treatment	After Treatment
1	Eye strain	+++	—
2	Blurred vision	+++	+
3	Redness	+++	+
4	Dryness	+++	+
5	Difficulty in opening of eye	+++	+
6	Burning sensation	+++	+
7	Schirmer's test	5mm	9mm

PROBABLE MODE OF ACTION OF DRUG

The *doshas* predominance in Dry Eye is mainly *Vata & Pitta*. Thus the *yogas* selected in this case study are mentioned as *samhita vata-Pitta shamak and chakshushya* properties which has been slightly modified with ayurvedic therapy.

Amalki rasayana -it is the concentrated preparation of *amala* where the *amala* powder is further fortified with its own decoction.^[9]

Saptamrit lauh- It is prepared from mixture of mineral and herbs. It is rich in iron content. The reference quoted as per *bhashajiya ratnavali* suggests that *saptamritlauha* not only cure various *netrarogas* but also act as *Rasayana*. All the constituents of *saptamrit lauha*, i.e *Haritaki, vibhitaki Amalki yastimadhu lauha bhama* have the *tridoshashagan* properties.^[10]

Triphala – *triphala* is the combination of three fruit :*haritaki, bibhitaki* and *amalki*. *Haritki* is good for *vata doshas*, *bibhitak* is good for *kapha dosha* and *amalki* is good for *pitta dosha*.

Triphala ghrita- *triphala ghrita* by virtue of its *Rasa, Guna, Veerya*, appears to be predominantlly *vatta –pitta shamak* followed by *kaphashamak*.^[11]

Especially these drugs helping in *Vata-Pita shaman* by their *Gunas* like *Guru,snigdha,mridu ushana,sheeta, rooksha, laghu* have *Madhura Vipaka*, it help in pacifying the *pitta Doshas*. So these drug reduce the vitiated *doshas* and help in correcting the pathology of the disease. By virtue of its *Rasayana* and *Chakshushya* properties, it helps to increase the strength of the organ, which in turn increase the speedy recovery from its pathological state. It balance the *pitta doshas* in body.

Ksheer neti-It is the composition of *triphala, mulethi, lodhra churna* and *ksheer*(Cow Milk). Dry eye is *vata* and *pitta* vitiated disease. In dry eye *vata* is vitiated by two ways- one way is

by increase in *vata dosha* and other way is by hinderance of flow of *vata* due to *strotorodha* *Tarpak kapha* is associated with all *indriyas* and *Ksheer* gives strength to them. *Sadhak pitta* works on function of brain and *alochak pitta* in eye. Herbal part of *ksheer neti* mainly works on *strotorodha* and it is helpful for removal of vitiated *doshas* mainly the *tarpak kapha*. By the *ushna* and *tikshna guna* of medicinal part it scrapes away the morbid *doshas* thus clearing the *strotorodha* and regulates the *vata dosha*. *Madhur* and *snigdha* properties of *ksheer* diminish *pitta dosha* and nourish all the *indriyas*.

Parisheka –Various *Yogas* for *parisheka* is mentioned in *Samhitas* in treatment of *Shushkakshipaka*. *Parisheka* is more useful in aqueous deficient conditions of dry eye in which tears gets stabilized with increased osmolarity of *Parisheka*. Absorption of *Parisheka* is more as compared to *Aschyotana* because comparative drug quantity used as well as tissue contact time is also more.

Aschotan- *Ashchyotana* with *durva grita* reduces congestion, burning sensation etc in the eye and symptoms of dry eyes are relieved because when drugs employed in the conjunctival sac in the form of aqueous solution and the period of tissue contact is very less; hence the bio-availability is very short. 80% of each drop is instantaneously drained through the nasolacrimal duct. *Durva* is *sheeta* in nature and *pitta shamak*.

Tarpana- *Tarpana* with *Jivanti ghrita* is mentioned in *samhitas* for treatment of *Shushkakshipaka*^[12], it helps to restore quality and quantity of tears because absorption of the drug in *Tarpana* procedure is more because the drugs used are lipid solution/ suspension. Penetration of fat soluble substance is high irrespective of molecular size. Tissue contact time of the drug is also more thus therapeutic concentration can be achieved and calms the *doshas*

Matra vasti – *Vasti* drug first reaches to the *Pakvashaya*(large intestine). *Pakvashaya* is the chief site of *Vatadosha*. Thus, by its action on the chief site, *Vasti* gets control on *Vata* all over the body.

According to modern medical science, as per *Vasti /Enema* concerned, in trans rectal route, the rectum has a rich blood and lymph supply and drug can cross the rectal mucosa like other lipid membrane. Thus by entering in general circulation, *Vasti* drugs acts on whole the body.

Shiropichu – *Shiropichu* can be described locally as well as systemically. Absorption of substances through the skin depends on a number of factors, the most important of which are

concentration, duration of contact, solubility of medication, and physical condition of the skin and part of the body exposed. In *Shiropichu* oil form is used which has good dense concentration with longer duration of contact. Also the skin over the scalp is thin as compared to other parts of the body and absorption is faster and more from the scalp. It works through action on *Tarpak Kapha*, *Sadhak Pitta* and *Pran Vayu*. Due to *Tikshana*, *Vyavayi* & *Sukshma* property of *Taila*. It nourish all the indriyas.

Nasyam - Nasyam is the specific treatment methodology mainly indicated for *urdhavajatrugat vikar* in ayurveda. *Nasya* remove the *srotorodha* and clear the channels to receive the sneha. Eye is an organ which should be protected from vitiated *kaph* and *vata* by removing the *dosha* all *doshas* pass in uniform way. Before *nasya*, *abhyang* is specifically done in *mukha Pradesh* which causes vasodilation in the skin and muscle by stimulating receptor of the symphathetic nerves. System vasodilation increase blood flow and help to remove the toxic product. Nourish the eye cell. Drug through nasal route reaches the *Shringataka Marma (Siro Antarmadhyam)* and spreads through nose, ear, eye, and tongue into *Shira* (head) eliminate morbid *Doshas* and ultimately promotes the normal physiological function. *Jeevantiyadi grita* is use as all *netra roga* but specially in *vata-pitta*. It is *chakshusya*.

DISCUSSION

The case taken for study was diagnosed as *Shushkakshipaka* (dry eye) Considering the involvement of *doshas* i.e. *pradhanyata* of *vata* and *Pitta*.

In modern science except use of artificial tear drops which acts only by lubricating ocular surface. This prevalence in modern ophthalmology opens the door to the other systems of medicine to suggests, experiment and contributes the drugs to alleviate or to check the deterioration. This challenge of the time was accepted by the Ayurvedic scholars, as they believed that nature provides both the diseases and drugs together. Eyes were greatly valued by ancient Indians and much importance has been accorded to their protection.

In ayurveda treatment was planned according to the *Dosha* and *Sthana dusti*. The *Prakupita dosha* got *ashraya* in the *Rasa-Raktavaha srothas* because of *Sanga* and *Atipravritti* type of *Srothodusti*. The pathological consequences are seen in eyes. Hence below mentioned treatment plan was done in keeping interest of *Dosha* and *Sthana dusti*. As the *samprapthi* is involved two ways;

- 1) Increase intake of *vata-pitta prokopapak netra utapadak aahar vihar*.
- 2) Visiated *doshas* due to *srotorodha*.

When the pathology is happening in two ways therefore, treatment should also be done in two ways:

Fistly remove the obstruction then calm the visiated *doshas*.

Ksheer neti, nasyam, anjan and ksheer sekam was planned to treat *srotorodha*. he complaints of eye strain redness, burnning sensation and difficulty in opening of eye got little bit reduced by 5days.

After that planned to treat the vitiated *doshas* by *snehan* therapy *aschotan, tarpan matravasti, mukhalepa* and *shiropichu*. By these processure absorption of *sneha* from different part of body for calm the *vata –pitta*.

Oral medication works on *doshas*, most of medicines are *chakshusya* and *rasayana*.

Ghritapana-Shushkakshipaka is a *Vata* predominant condition where *Ashru-* Tears are depleted due to lack of proper *Rasa Dhatu* formation; hence for normalization of *Rasa dhatu* systemic administration of Medicated *Ghrita* is essential. *Acharyas* has indicated *Ghritapana* as a first line of treatment for *Shushkakshipaka* along with other topical regimes.

CONCLUSION

Although Ayurved is holistic science takes care of human being with helps of nature. Medicaments and procedure of application described compensate vitiated *Doshas* and *Dhatu*s. The *doshas* predominance in Dry Eye is mainly *Vata & Pitta*. Thus the *yogas* selected in this case study are mentioned as *samhita vata-Pitta shamak and chakshushya* properties which has been slightly modified with ayurvedic therapy.

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