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Ayurvedic Management of *Shushkakshipaka* w. s. r. to Dry Eye Syndrome-A Review.

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ABSTRACT:

The windows to the soul are the eyes. Since the Vedic and Samhita times, Ayurvedic ancient writings have discussed the eye and its disorders, demonstrating the significance of the eye and ways to protect it. Because of this, eye care has always been a top priority. Clinical characteristics of Dry eye are frequently observed in Suskaksipaka in Ayurveda. It's common to equate dry eyes to shushkakshipaka. However, a closer examination of the dry eye symptoms reveals two Ayurvedic terms that are closely related to the illness. The first stage of vartma roga (disease of the lid), which is defined as vata prakopa over the surface structures of the eye due to a lack of *snigdha bhava*, either in the form of abnormal aqueous or lipid component of tear film, which in turn creates difficulty in opening the lids, pricking pain, and a gritty feeling, is known as Krichronmeela. Shushkakshipaka, a sarvakshi disease, appears when *pita* becomes engaged in the pathophysiology and samprapti deepens into the dhatus over the surface structures of the eye, such as the conjunctiva and cornea.

Keywords- *Shushkakshipaka, Sarvakshi Roga, Krichronmeela, vartma roga*, dry eye

INTRODUCTION

One of the eight disciplines of Ayurveda that has existed for a very long time is *Salakya Tantra*. It addresses the aetiology, diagnosis, prognosis, prevention, and treatment of illnesses that affect the eyes, nose, head, and ears, which are positioned above the *Urdhwa jatrugata*. *Netra* is given the utmost priority in this branch since it is regarded as the *Pradhana* of all Indriyas.¹ One of the "*Sarvagata Netra Rogas*" referred to by Sushruta and Vagbhata under the category of "*Vyadhis*" and brought on by *Vata and Pitta* *Doshas* and characterised by *Gharsha*, *Toda*, *Bheda*, *Upadeha*, *Krichronmeelan*, *Vishushkata*, *Rooksha Daruna Vartma*, etc.² The *Shushkakshipaka*, which has been compared to "Dry eyes" in contemporary medicine, is one of numerous eye illnesses that have been recognised by both ancient Ayurvedic texts and modern medicine. The clinical symptoms of dry eye syndrome (DES), a multifactorial condition of the tears and ocular surface, include irritation, a sense of a foreign body, dryness,



itching, general ocular discomfort, chronic painful eyes, photophobia, etc.^{3,4} For the purpose of to cure dry eyes, lubricating eye drops like carboxymethylcellulose 0.5% are employed, however their preservatives are harmful to the eyes.⁵ Thus, prolonged usage is not feasible, and the effects of artificial drops are only short-lived. Other therapeutic options, including as surgery, are both unavailable and ineffective. These restrictions prompt us to consider efficient and non-traditional dry eye treatments. This provides the possibility for other medical systems, such as Ayurveda, to recommend and contribute alternative therapy approaches to alleviate dry eye pain. There are no curative therapy options, and palliative therapies are often insufficient. Ayurvedic medicine tackles the dosha vitiation that causes dry eyes in order to cure the disease at its source, in contrast to most modern treatment techniques that just aim to reduce local dryness. The absence of preservatives and affordability are additional benefits of ayurvedic dry eye therapy.

AIMS & OBJECTIVE

To evaluate, elaborate and discuss the management of *shushkakshipaka* w. S. R. To dry eye syndrome

MATERIAL & METHOD

Material related to *shushkakshipaka* and dry eye is collected from Ayurvedic text and text book of modern medicine respectively.

Review Of Literature

Shushkakshipaka

Acharya Sushrut categorised eye conditions under many headings, including "Diseases affecting all parts of the eve ball, i.e. Sarvagata Netraroga; includes disease shushkakshipaka," which is remarkably similar to Dry Eye Syndrome in contemporary ophthalmology. shushkakshipaka described as a Vataj disease in Sushrut Samhita.⁶ Vata pitta vitiated condition by Vagbhata⁷ and Śarangadhara considered this as Vataraktaja.⁸ By examining these many viewpoints, it is evident that Vata, Pitta, and Rakta vitiation play a significant part in the pathophysiology of the condition, which causes the eye to become dry by lowering tear secretion or by altering the quality of tears (tear film defect). Although the shushkakshipaka stated in the Sushrut Samhita appears to be in an early stage, Acharya Vagbhatt describes it as a well-established advanced illness condition with a preponderance of Paka - inflammation - and it is mostly caused by vitiated Vata and Pitta doshas. Kuita vartma (inability to close the eyes), Daruna and Ruksa vartma (hard, rough lids), Avila darsana (blurring of vision), and Daruna Pratibodhana (difficulty opening the eyes) are symptoms that define the disorder.⁹ Acharya Vaghbhaṭa mentioned additional features such as gharsan (foreign body sensation), toda (pricking pain), bheda (tearing pain), upadeha (stickiness of lids), ruksata and Daruṇata of Vartma and aksi (hardness and roughness of the eyelids and eye).¹⁰ The signs and symptoms of shushkakshipaka frame a picture of dry eye syndrome in modern science.

Dry Eye Syndrome

When your eyes don't produce enough tears to keep moist or when your tears don't function properly, dry eye results. Your eyes may feel unpleasant as a result, and in some circumstances, vision issues may result. Every year, millions of Americans suffer from dry eye. The good news is that there are many things you can do if you have dry eye to maintain your eyes healthy and pleasant.¹¹

Dry Eye Syndrome Prevalence

The prevalence of dry eye disease (DED), according to epidemiological research conducted worldwide, varies from 5 to 50%. According to information from the National Health and Wellness Survey, DED has been identified in 6.8% of adult Americans (or around 16.4 million individuals). The frequency was greater in women than in males (8.8 vs 4.5%) and rose with age (2.7 percent in those 18 to 34 years old compared to 18.6 percent in those 75 years old). Education levels or residential area had little impact on prevalence. A combined prevalence of dry eye of 8.1% was predicted by a 2022 meta-analysis of three research from the United States.¹²

Nidan (Aetiology)

Vata vitiating *nidana* are the cause of dry eyes. Later, the disease pathology is also influenced by pita vitiating substances.

Nidana can be divided into two categories.

Samanya Nidana

Nidana which can cause vitiation of vata and pita are

Vegavinigraha or suppression of natural urges. causes *vata* vitiation.

Suppression of *adhovata, mala,mutra* and *nidravega* can initiate ocular pathology.

Dhoomanishevana – direct exposure to smoke. Causes vitiation of pita dosha by its ushna teekshna guna. Also vata dosha is aggravated by its ruksha, laghu, sookshma.

Smoking is an aetiological factor for dry eye.¹³

Rajodhumanishevanath (Bhavamisra) – exposure to dust and smoke.¹⁴

Atisheegravyanath – traveling in vehicles

Atisheetha sevanath- may be in the form of airconditioned environment. This leads to *vata prakopa*

Vishesha Nidana Nidana that are responsible for eye disease are mentioned in detail by Susrutha.¹⁵ Amongst these *nidana*, those that lead to dry eye are *Doorekshanata*, or prolonged long-distance observation. Because of infrequent blinking, the meibomian glands' production is reduced. prolonged visual tasks like reading or watching TV that are linked to a lower blink rate.

Swapna viparyaya or altered sleep pattern. Night awakening cause *vata pita prakopa*.

Prasakta Samrodana or continuous weeping. It causes *vata* vitiation. It leads to neuro deprivation resulting in less tear secretion

Kopa and Shoka or excessive anger and grief also leads to *pita and vata* vitiation respectively which affects the tear secretion.

Food like *shuktha*, *amla*, *aranala* have alcoholic properties , leads to *vata pita* aggravation.

Kulatha is *kashya rasa Ushna veerya and amla vipakin.*¹⁶ If taken for long time causes *rakta and pita* disorder.

Asatmendriyartha samyoga especially *athiyoga and mithya yoga* of *Chakshu indriya*.¹⁷

Risk Factors for Dry Eye Syndrome

One of the most common ophthalmologic disorders, dry eye can have hundreds of different causes. Almost often chronic, progressive, and producing mild or moderate symptoms, diseases that cause dry eyes can sometimes result in severe impaired vision and pain. The following list includes some risk factors for dry eye syndrome:

Physiological conditions- Slowing of the blink rate increases the blink interval and increases the period of evaporative loss between each blink.¹⁸

Anatomical Conditions- Height of the palpebral is wider in up gaze than down gaze.¹⁹ Evaporative loss per eye increases with increasing palpebral width and is therefore, increased in upgaze.²⁰

Sex Hormones- Low levels of androgens and high levels of oestrogens are risk factors for dry eye. Androgens promote lacrimal and meibomian gland's function.²¹ Female sex and Postmenopausal oestrogen therapy are important risk factors for dry eye.²²

Systemic drugs- There is a collateral exocrine hyposecretory impact of several systemic medications.

Aside from certain preservatives used in ocular drugs, they include antidepressants, anxiolytics, sleeping pills, antiparkinsonian, diuretics, vascular antihypertensives, anticholinergic, antihistaminic, and antiarrhythmics.

Aging- It is linked to physiological alterations that may lead to dry eye, such as reduced tear volume and flow, increased osmolarity, decreased tear film stability, and changes in the meibomian lipid composition.²³

Management of *shushkakshipaka* (dry eye) through ayurveda

The goal of treatment is to slow the progression of the disease or interfere with its aetiology. When *vata* is predominate and the ailment is just affecting *vartma* in the first stage, *vatahara* therapy is carried out with special attention paid to not vitiate *sthanika pita*. A crucial part is also played by *hetuprathyaneeka chikitsa*, which takes the shape of lifestyle adjustment. *Vata pita hara chikitsa* is suggested during the second stage, when *pita and vata* are the predominate energies.

Some Aoushdhi yoga^{24,25}

Puranaghrata medicated with *draksha kalka* and sugar *Purana ghrta* helps in alleviating vata vitiation and addition of *pita saman* drugs like *draksha* and sugar helps to protect the *sthanika pita*. *Snigdha nasya, dhoomapana* and *anjana* are helpful in treating *vata* vitiation

Ghrta pana with jeevaneeya gana

Tarpana with jeevaneeya ghrta

Nasya with anutaila

Seka with *koshna* milk with *saindhava* or milk with *haridra and devadaru*

Vasanjana mixed with shunthi and saindhava

The property owned by *Jeevaneeya Gana* is *vatahara*. The purpose of *nasya* with *anutaila* and the inclusion of shunthi to the preparation is to safeguard *kapha*, which can become vitiated as a result of *snigdha and brimhana* therapy. *Hetupratyanika* Chikitsa has a significant impact. So, in addition to the required treatment, lifestyle changes must be suggested.

Some of the required changes are:

Avoid excessive air movement: windy conditions – outside or inside

Avoid hot, dry environments and to add moisture to the air. Airconditioning is as bad as heaters for increasing the evaporation of tears.

Wear glasses on windy days and goggles while swimming. The wraparound style of glasses may help reduce the effects of the wind. Goggles protect eyes from chemicals in pool water that can dry the eyes.

Take frequent breaks: While watching TV, reading or working at a computer.

Position the computer screen below eye level: Computer screen below eye level keeps the eye open narrowly. This may help slow the evaporation of tears between eye blinks.Stop smoking and avoid passive smoking 3.8

Sadhyasadhyatha

The diseases *Krichronmeela and Shushkakshipaka* are both *sadhya*, or curable. However, if left untreated, *pilla*, a chronic disease, may develop.

DISCUSSION

In Shushkakshipaka, also known as Dry Eye Syndrome, the eyes become dry as a result of an increase in Vata-Pitta dosha prakopa; vitiated Vata and Pitta reach up to Netra (Prasara-Sthanasamsraya) by the sira. At Netra, they corrupted Rakta dhatu to create Shushkakshipaka, which leads to a sparse Ashru and the development of dry eyes. Dry eyes, according to Ayurveda, are not just an ocular surface ailment; rather, they are one of the symptoms of an abnormal metabolism in body tissues. Without restoring or changing Rasa, Meda, and Majjadhatu, which produce ashru (tear film), we cannot effectively cure dry eye syndrome. Shushkakshipaka can be treated using a variety of therapeutic methods, including Snehpana, Tarpa, Putpaka, Nasy, and Anjana. Consequently, it could lessen eye irritation, inflammation, and dryness. The current situation has shown that our comprehension of the illness Shushkakshipaka (Dry Eye Syndrome) and creating the therapy protocol in accordance with this understanding has been significantly more successful than the current care methods.

CONCLUSION

The eye is the main sense organ that God provided us. Every person should make sincere attempts to maintain their vision till their final breath since for a blind person, day and night are the same and this beautiful planet is of no value to him or her even if he or she has a lot of money. Even while modern ophthalmology has made some remarkable advancements, there are still some limitations. Ayurveda, a form of traditional medicine, provides practical recommendations for both prevention and treatment. Because of the Doshas-based therapy and strategy of the Ayurvedic school of medicine, the patient experienced both subjective and objective alleviation. This is due to the fact that there is no treatment available in modern medicine other than symptomatic relief for the dry eye problem. The treatment and strategy of the Ayurvedic system of medicine, according to the *Dosha*, provided the patient with both subjective and objective relief. We can therefore conclude that the dry eye syndrome is a condition for which modern medicine has no treatment other than the symptomatic management.

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