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# MANAGEMENT OF SHUSHKASHIPAKA THROUGH AYURVEDA: A LITERARY REVIEW

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#### **ABSTRACT**

The Eyes are often regarded as window to the soul as whole world is in darkness without Eyes and Eye care has been a priority throughout history as our old classical Ayurvedic texts have referenced the Eyes and their ailments since a long, highlighting their significance and the methods their protection. Acharya Sushruta Shushkaksipaka as one of Sarvagatha Netra Roga among 76 Rogas of Netra and the clinical characteristics of it is associated with Dry Eye Syndrome of today such as severe dryness and impaired vision. Dry Eve Syndrome occurs when tears fail to provide sufficient lubrication for the Eyes. The worldwide occurrence of Dry Eye Disease is estimated to be approximately 11.59%. Dry Eye Syndrome in Allopathy science have no permanent cure they only have artificial tear drops and lubricants which provide temporary relief from symptoms, in contrast there are various treatment principles suggested in

Ayurveda for *Shushkashipaka* which are effective and free from side effects including *Tarpana*, *Seka*, *Aschyotana* and *Anjana* which are recognized for their ability to enhance tear film stability and alleviate the symptoms associated with *Shushkakshipaka*. This article aims

to gather comprehensive information regarding *Shushkakshipaka* and the various types of Dry Eye Disease.

KEYWORDS: Shushkakshipaka, Dry Eye Syndrome, Anjana, Tarpana.

# **INTRODUCTION**

Ayurveda is among the most ancient holistic healing systems globally. It is based on the principle that optimal health and overall well-being arise from a harmonious balance among the mind, body, and spirit. [1] Shalakya Tantra is one of the eight branches of Ayurveda, with a long-standing history and this discipline focuses on the etiology, diagnosis, prognosis, prevention and treatment of ailments affecting areas above the *Urdhwajatrugata* specifically the Eyes, Nose, Head, and Ears. Within this branch, significant emphasis is placed on the Eyes which are regarded as the most important among all sensory organs. [2] In today's era modification in lifestyle leads to metabolic alterations that have adverse effects on activity of Eyes causing illness such as Dry Eye Syndrome. Shushkakshipaka is referenced in the old literature of Ayurveda as Sarvagata Netraroga means which can effect all parts of Eye. [3] Sushruta Samhita described Shushkaksipaka as a Vata Dosha vitiated disease and Vagbhatta it as the Vata-Pitta vitiated condition. On having critical analysis of symptoms of Dry Eye Syndrome, it is clear that all the symptoms are mainly related to vitiation of Vata and Pitta Dosha traverses to the Eyes by Siras and gets accumulated in Eye to manifest the disease Shushkakshipaka.

Other names for Dry Eye Syndrome include Xerophthalmia, Dysfunctional Tear Syndrome, Keratitis Sicca, Keratoconjunctivitis Sicca, Sicca Syndrome, Ocular Surface Disease, and Dry Eye Disease. The prevalence rate of Dry Eye Syndrome is 5-50% which can reach 75% in adults over 40 years old with women being the most affected. The prevalence of Dry Eye Syndrome in India is higher than anywhere in the world ranging from 18.4% to 54.3%. Studies have shown that female gender is a risk factor for developing Dry eye syndrome with a prevalence ranging from 12 to 22%. Dry Eye is a multifactorial disease of the tears and ocular surface that results in symptoms of discomfort, visual disturbance and tear film instability with potential damage to the ocular surface. It is accompanied by increased Osmolarity of the tear film and inflammation of the Ocular Surface. The tear film is approximately 2 to 5 µm thick over the cornea and is composed of three main components. These components (lipid, aqueous, and mucin) are often described as layers, although this may be an oversimplification of the tear film. Stress on the ocular surface (infection,

environmental factors, endogenous stress, genetic factors, and antigens) may play a role in the pathophysiology of Dry Eye. Recent understanding indicates that dry eye syndrome is linked to an inflammatory process mediated by cytokines and receptors that affects the lacrimal glands. This inflammation can lead to a reduction in tear production or modify the composition of the tear film, disrupting the homeostasis of the ocular surface and resulting in dry eye syndrome. Dry Eye Syndrome can cause a wide range of symptoms including foreign body sensation, burning, itching, redness, dryness, irritation, grittiness, prolonged tears (due to reflex secretion), photophobia and blurred vision interchangeably that could better after blinking. Aqueous deficiency dry eye and evaporative dry eye are the two main nonmutual exclusive etiology groups into which Dry Eye Syndrome is typically divided, another group of patients suffer from Dry Eye caused by mucin deficiency due to Stevens-Johnson syndrome or Ocular Cicatricial Pemphigoid.

## **Aqueous deficiency Dry Eye**

- a) Sjogren's Syndrome (Primary or Secondary)
- b) Non-Sjogrens Keratoconjunctivitis Sicca: Because of Lacrimal deficiency, Lacrimal Gland obstruction, hyposecretory state, etc.

# **Evaporative Dry Eye**

- a. Meibomian gland diseases related Evaporative Dry Eye
- b. Evaporative Eye in disorders of Lid aperture congruity and blink dynamics.
- c. Ocular surface related Evaporative Dry Eye.

Tear substitutes are the only treatment modality with modern medical science. The duration of action of these tear substitutes is variable and are advised as per the need, only providing symptomatic relief. The preservatives present in these formulations are also a cause of dry eye, whereas those available without preservatives are not cost-effective.

# NIDA NA

There are no distinct *Nidanas* associated with *Shushkakshipaka* however, a general *Nidana* applicable to all *Netra Rogas* can be inferred regarding the onset of this condition (Diving into water after exposure to heat or Sunlight, Continuously looking at distant objects, alterations in sleep habits, excessive weeping, anger/grief, injury to head, excessive use of sour, *Kulatha* and *Masha*, suppression of natural urges, excessive perspiration, smoking actively or passively, suppression of or excessive vomiting, suppression of tears,

concentrating on minute objects, intake of fluids and other foods at night, Alcohol, alterations in seasons, traveling in very high speed.

#### **PURVAROOPA**

Acharyas have provided a general description of the Purvroopa<sup>[9]</sup> for all types of *Netra Roga* as *Avilata* (Eyes filled with discharges or tears), *Samrambha* (Congestion or swelling), *Ashru* (Watering), *Kandu* (Itching), *Upadeha* (Stickiness), *Guruta* (Heaviness), *Usha* (Burning sensation), *Toda* (Pricking pain), *Raga* (Redness), *Vartma-Kosha Shoola* (Pain in the lids or fornices), *Shookapurnabham* (Foreign body sensation), *Vihanya-Aamana-Rupa* (Visual disturbances), *Vihanya-Aamana-Kriya* (Improper functioning of the eye), *Kriya-Swakshi Ayathapura* (Reduced blinking).

#### **ROOPA**

The symptoms manifested of a disease are *Roopa*. The *Sushruta Samhita* reference of *Shushkakshipaka* described symptoms as *Kunita Vartma* (inability to close lids/photophobia), *Daruna* and *Ruksa Vartma* (hard, rough lids), *Avila Darsana* (blurring of vision) and *Daruna Pratibodhana* (difficulty in opening the lids). [10] *Acharya Vagbhatta* described it as a well-established advanced illness state with *Paka* (inflammation) along with its additional features such as *Gharsa* (foreign body sensation), *Toda* (pricking pain), *Bheda* (tearing pain), *Upadeha* (stickiness of lids/mucous discharge), *Ruksatwa* and *Darunatwa* of *Vartma/ Aksi* (hardness and roughness of eyelids and eye), *Krichrounmilana* (difficulty in opening and closing of eye), *Vikunana* and *Vishusakatwa* of eyes, *Sittecha* (desire for cold), *Shoola* (Pain). [11]

#### **CHIKITSA**

Various types of treatment modalities are recommended in Ayurveda *Samhitas* for management of *Shushkashipaka* including systemic therapies like *Virechana*, *Snehapana*, *Rasayana*, *Nasya*, *Basti*, *Murdha taila* (*Shiroabhyanga* and *Shiro Basti*) etc. and topical medicines like *Ksheera Ashchyotana*, *Tarpana*, *Snehana Putapaka*, *Snehana Anjana* etc. and various *Shamanoushadhis*. *Acharya Sushruta*<sup>[12]</sup> has provided two essential measures for the treatment.

#### **General Treatment of Netra Rogas**

a) Avoidance of *Nidana*: This refers to steering clear of the specific etiological factors that contribute to the disease.

b) Preventive Strategies: For Eye health, recommendations include the use of *Triphala*, maintaining a tranquil mind, applying *Anjana*, practicing *Nasya*, performing *Siravedhana*, consuming bird meat, showing respect by prostrating before elders, engaging in *Ghritapana*, receiving foot massages, taking foot baths, and utilizing an umbrella, among preventive measures.

## Vishishta Chikitsa of Shushkakshipaka

# **Local actions**

- **❖** *Anjana*<sup>[13]</sup>
- Rashkriya Anjana: Saindhava, Devdaru and Shunthi were mixed with water, Ghrita and Matulunga rasa.
- Saindhava, Shunthi and Anoopa and Jalaja Vasa were used to make Anjana.
- Mahaushadha Anjana.
- *Keshanjana* is made by rubbing human hairs with *Ghrita* on a mirror, then preparing *Masi* in a *Putapaka* and mix it with *Ghrita* in a *Lauhapatra*.
- ❖ Parisheka with the help of Saindhava Lavana mixed Milk and Saindhava Lavana combined with cold water.
- Nasya and Tarpana: Nasya is accompanied by Anu Taila and Tarpana with Jeevaniya Ghrita.
- Putpaka: Snehana Putpaka is advised in Shushkashipaka.
- \* Pindi: In Vata-Pittaja problems such as Shushkashipaka Snigdha Pindi is advised.
- ❖ Varti: Brihati, Eranda Moola, Tavaka, Shigru-Moola and Saindhava lavana all are processed in Aja Ksheera to make Varti.
- ❖ Aschyotana: Tikta-Snigdha and Madhura-Sheetala Aschyotana are indicated in Vataja Netra Rogas and Pittaja Netra Rogas respectively and also Stree-Stanya Aschyotana is recommended for Eye diseases caused by Rakta, Pitta and Vata vitiation.

# **Systemic actions**

- Ghritapana: The Jeevaniya Ghritapana and Ghirta prepared from Dugdha and Kulira Rasa is advised in Shushkashipaka.
- ❖ Basti: It is recommended to administer Basti made from milk processed in Madhuka, Shatahva and Ghrita supernatant.

#### **UPADRAVA**

Shushkakshipaka is identified as one of the 18 diseases by Acharya Vagbhatta that may advance to a chronic condition and is also known as Pilla Roga. There fore, it can be concluded that Shushkakshipaka can be complicated to this category of diseases.

#### PATHYA FOR NETRAROGA

## Pathya Ahara

Ghrita, Mudaga, Yava, Aamalaka, Payasa made with Shatavari or Amalaki or else barley meal cooked with enough Ghrita are Pathya for Eye. [14] Furthermore, food preparations such as Peya, Vilepi, Tikta and Laghu Ahara, Shalitandula, Godhuma, Saindhava, Goghrita, Gopaya, Sita, Kustumburu, Surana, etc. Vegetables cooked with Ghrita help to improve eyesight, i.e., Jivanti, Sunishannaka, Tanduliya, Vastuka, chilli and Madhuka, Patola, Karkotaka, Karavellaka, Vartaka, Karira, fruits, Shigru. Purana Ghrita, Triphala, Draksha, Lodhra, Punarnava, Kakamachi, Kumari, Chandana, Dadima, Karpura, Bhrigaraja, Shatavari, Madhu.

# Pathya Vihara

Various lifestyles mentioned in Ayurveda classics to prevent Eye disorders, i.e., Padabhyanga, Padaraksadharana, Sitodaka Pariseka, Sitodaka Snana, Sitodaka Gandusha Dharana, Manaso Nivritti, Sita Jala Prakshalana, Netra Prakshalan, Anjana, Nasya, Sirobhyanga, Padabhyanga, Pada Prakshalana, Padatra Dharana, Chatra Dharana.

#### DISCUSSION

The Eye serves as the primary sensory organ bestowed upon us by God. It is essential for every individual to earnestly strive to preserve their eyesight throughout their lives, as for those who are blind, the distinction between day and night becomes irrelevant, rendering the beauty of this world meaningless, regardless of their wealth. Ayurveda, a traditional medicinal practice, offers valuable guidance for both prevention and treatment of Eye diseases. The *Nidana Parivarjana* and *Dosha*-based approach of Ayurvedic medicine and *Kriya-Kalpa* procedures is very much effective in preventing and managing both subjective and objective improvements for *Shushkakshipaka* patients, highlighting the absence of effective treatments in other areas. Dry Eyes are a prevalent cause of persistent low-grade burning, irritation and discomfort in the eyes leading to decrease in quality of life of patients and decrease in productivity. Ayurveda offers a lot of management aspects *Virechana*, *Snehapana*, *Rasayana*, *Nasya*, *Basti*, *Murdha taila* (*Shiroabhyanga* and *Shiro Basti*),

Ashchyotana, Tarpana, Snehana Putapaka, Snehana Anjana and a lot of oral medicines to cope up Shushkakshipaka (Dry Eye Syndrome) in place where modern medicine only provide temporary symptomatic relief does not stop the pathogenesis of Dry Eye Syndrome.

#### **CONCLUSION**

Dry Eye Syndrome leads to complications such as Keratitis, Iridocyclitis, Glaucoma, Endophthalmitis when not treated on time which can lead to loss of vision. Alllopathy science also has limited scope in form of Lubricants and Artificial tear drops and also the preservatives present in these formulations are also a cause of Dry Eye on continuous use, whereas those available without preservatives are not cost-effective. So there opens a door towards Ayurveda therapy which has a lot of scope in prevention and management of *Shushkakshipaka* (Dry Eye Syndrome) which is cost effective.

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