

CASE STUDY

Management of *Shushkakshipak* (Dry Eye Syndrome) with *Jivantyadi Ghrita Netratarpana* and *Nasya* - A Single Case Study

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ABSTRACT

Tear secretion, known as *Ashru* in Ayurveda, plays a vital role in maintaining the health and function of the ocular surface. It helps in the lubrication of the eyes, provides nutrients to the cornea, and protects against pathogens, thus contributing significantly to ocular surface physiology, it is compromised (quantitatively or qualitatively) and leads to *shushkakshipaka* (dry eye syndrome) with various ocular discomfort symptoms and ultimately the patient may land in corneal blindness. Local, systemic and environmental, lifestyle associated factors play a major role in its pathogenesis. As per Ayurveda *Vata & Pitta/Rakta* vitiation is the major contributing factor in its manifestation². A 45-year female patient visited the *shalakyatantra* OPD on 29th December 2023 (YMT Ayurvedic Medical College and Hospital) complaining of ocular discomfort in both eyes with foreign body sensations for the last 3 months, blurring of vision, dryness since last 2 months . The patient was evaluated pre- and post-after applying parameters like schirmer test, rose bengal test, TBUT test. The patient was advised to take treatment of *Nasya* and *Tarpana* with *Jivantyadi Ghrit* for 7 days with This case study discusses a *Shushkakshipaka* in which patient underwent dynamic Ayurvedic treatments which showed remarkable results.

Key Words *Shushkakshipak*, Dry eye syndrome, *Tarpan*, *Nasya*, *Jivantyadi Ghrit*, schirmers test, Rose Bengal test

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INTRODUCTION

Classical texts like Sushruta and Madhav Nidan explain causative factors for eye diseases, while modern lifestyles like excessive use of Digital gadgets contribute to increased eye disorders. Dry eye is a common ocular morbidity, often overlooked by ophthalmologists, with a global prevalence of 20 to 50%, a growing health issue². Dry eye syndrome can be clinically correlated

to *Shushkakshipaka* according to Ayurveda texts. It is classified under *Saadhya Sarvagat Netrarog* due to the vitiation of *Rakta* and *Vata* according to *Sushrut*³ and aggravated *Vata-Pitta* according to *Vagbhat*. Symptoms of *Shushkakshipaka* are *krichonmilan*² and dryness of eyes, stiffness, and dryness of eyelids, blurred vision, pricking sensation in eyes, burning sensation, sticking of lids, liking towards cold, pain, and pus

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formation.³ In the modern system of medicine, the use of artificial tears, lubricating eye drops, and ointments that give short-term relief are advised. In Ayurveda, procedure of *netra* or eye are explained as *netra kriyakalpa*. These procedures help to alleviate the disease and to strengthen the proper functioning of eye. All together 7 *kriyakalpas* have been explained by ancient Acharya namely *Tarpan, Putpaka, Anjan, Seka, Aschotan, Pindi, and Bidalak*. *Tarpan kriyakalpas* is one very significant treatment procedure in which eyes are filled with medicated ghee for a specific period of time by special arrangements made around the eyes with *mashapali*. (prepared with white gram flour)

CASE REPORT

A 45-year-old female visited *shalakyatantra* OPD (YMT Ayurvedic Medical College and

hospital on 29th December 2023) she had complaint of discomfort with foreign body sensation in both eyes and a feeling of dryness since 4 to 5 months.

NO any medical history of DM and HTN

GENERAL EXAMINATION:-

pulse - 78 /min

BP - 120/80 mm of Hg,

Resp - 20/min, temperature -Afebrile

The aim of the investigation is to confirm and quantify the clinical diagnosis of dry eye. The test measuring the parameters should be as follows:

1. Visual Acuity
2. Schirmer's Test
3. TBUT test
4. Rose Bengal Test

Table 1 Examination of anterior parts of eyes

LID	Greasy (Right Eye) meibomianitis	Greasy (Left Eye) meibominitis
CONJUNCTIVA	xerosis	xerosis
SCLEARA	normal	normal
CORNEA	dry	dry
ANTERIOR CHAMBER	maintained	maintained
IRIS	Normal	normal
PUPIL	Round, regular, reacting	Round, regular, reacting

Table 2 Visual acuity

vcc	6/6p (Right eye)	6/6p (left eye)	N6 with strain
vph	6/6P	6/6P	



Image 1 Schirmer readings on 29th December 2023 5mm (Rt eye) 3mm (Lt eye)

TBUT test (tear break up time)¹⁴ positive (1st spot appears within 5 seconds)

Tear film break-up (BUT). It is the interval between a complete blink and the appearance of a first randomly distributed dry spot on the cornea. It is noted after instilling a drop of fluorescein and examining a cobalt-blue light of a slit lamp. But is an indicator of the adequacy of the mucin component of tears. Its normal values range from

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15 to 35 seconds. Values less than 10 seconds imply an unstable tear film.

Rose Bengal staining¹⁴ Positive (showed in image 2)

Rose Bengal staining. It is a very useful test for detecting even mild cases of dryness. Depending upon the severity of dryness, three staining patterns A, B, and C have been described: 'C' pattern represents mild or early cases with fine punctate stains in the inter palpebral area; 'B' the moderate cases with extensive staining; and 'A' the severe cases with confluent staining of conjunctiva and cornea.



Image 2 Rose Bengal staining positive (Before treatment)

Table 3 Therapeutic index -Ayurvedic Kriyakalpa

Treatment	Drug name	Dose	Duration
Nasya	Jivantyadi ghruta	8 Drops	7days

Table 4 Ingredients of Ayurvedic medicine

DRUG	CONTENT
Jivantyadi Ghruta ⁵	Go-ghruta , Go-dugdha , Kakoli , Kshirkakoli , Pippali , Lodhra , Saindhav , Shatahva , Madhuka ,Draksha , Sita ,Daruharidra, Trifala ,

DISCUSSION

Along with the above medicine, patient was advised simple lifestyle modifications that can significantly improve symptoms related to dry eyes.. E.g drinking 8-10 glasses of water each day to keep the body hydrated and flush out impurities.

<i>Tarpan</i>	<i>Jivantyadi ghruta</i>	100 - 700 matra in increasing order	7 days
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MATERIAL AND METHODS

Nasya procedure

Poorvakarma or pre-purification measures Include facial oil massage or application of steam to the face, forehead, head, ears, and neck. This helps to loosen the adhesive *Doshas*.

Pradhanakarma:- Artifact of Luke warm *Jivantyadi Ghruta* in both the nostrils, alternately, with the help of a dropper. The sole, shoulder, neck, ear, and palm are gently massaged after the administration of the drug.

Paschatkarma:- patient's mouth is cleaned by giving Luke warm water to gargle.

Tarpan procedure:- The patient is made to lay supine position in a dust-free room, Then the eyes are encircled with firm, compact leakproof *mashpali* .The patient was asked to close their eyes and over the closed eyes, lukewarm *Jivantyadi Ghruta* was poured, to the level of the tip of their eyelashes. the patient is asked to open and close the eye intermittently and steadily.

Make a conscious effort to blink frequently, especially when reading or watching TV, and avoid rubbing your eyes as this only worsens the irritation. The patient was given treatment of Nasya and *Tarpan* with *Jivantyadi Ghrut* for 7 days (referred image 3rd) and marked relief was

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observed in the lasting relief to the patient with moderate to severe dry eye syndrome.

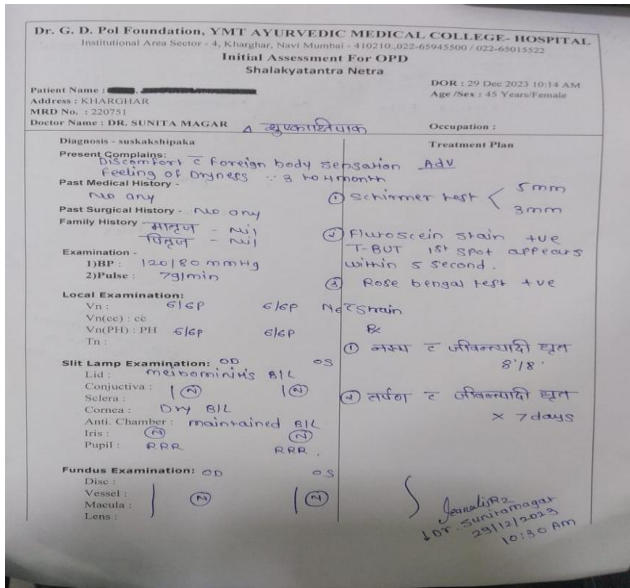


Image 3 Before treatment:- Case Findings symptoms like discomfort in eyes, foreign body sensation, and feeling of dryness.

In Ayurveda, dry eye syndrome is co-related with *sushkakshipak* it is classified under *Saadhya Sarvagat Netrarog* due to vitiation of *Rakta* and *Vata* according to *Sushrut* and aggravated *Vata-Pitta* according to *Vagbhat*.

Tarpan forms an occlusive film over the surface of the eyeball and improves the composition of tear film ameliorating the mucin and aqueous layers. it prevents frictional damage to the ocular surfaces secondary to lid movement or extra ocular movements. It helps by retaining fluid and maintaining hydration of the ocular surface.

Jivantyadi Ghrita is rich in lipid content which reflects mucoadhesive properties, and the degree of contact time with the ocular surface is greater. *Tarpana* also stimulates the lacrimal glands to produce tears. mucin layer which is present in tear film allows the *Ghrita* to spread over the ocular surface This approach provides long-

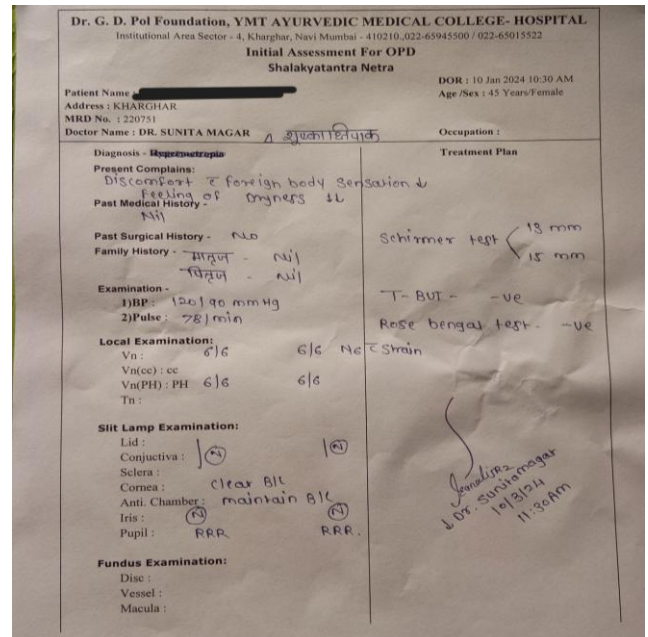


Image 4 After treatment:- Case findings

CONCLUSION

The patient showed considerable improvement subjectively and objectively. Betterment in Schirmer's reading and visual acuity improvement was observed in both eyes (Referred image 4th) The effect of *Jivantyadi Ghrita Nasya* and *Tarpan* is better in the subsequent follow-ups than immediately after effect of the treatment.

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