



**THE EFFICACY OF NETRATARPAN WITH PATOLADI GHRITHA IN DRY EYE  
SYNDROME (SUSHKAKSHIPAKA)**

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**ABSTRACT**

Dry eye is a life style ophthalmic problem mainly affecting in the middle age and elderly people. The dry eye is not a disease but a symptoms complex occurring as a squeal to deficiency or abnormality of the tear film. Over use of computer and mobile, laptop is the major cause. It is a disease of deficient or deranged tears and ocular surface disorder producing symptoms of discomforts, visual disturbance & tear film instability. *Shushkakshipaka*, an etymologically and clinically similar entity to dry eye syndrome, The disease affecting all part of eye characterized by *paka* (inflammation) due to *shuskatva* (dryness) caused by altered coherence of *Ashru* (Tears) with ocular surface or due to lack of *Ashru*.

**KEYWORDS:** Dry Eye Syndrome, *Sushkakshipaka*, *Tarpan*, *Patoladi Ghrita*.

**INTRODUCTION**

*Ayurveda* describes a similar condition called *shushkakshipaka*, which matches etymological derivation and clinical features. *Shushkakshipaka* is one among *Sarvagata netraroga* mentioned by *Sushruta* as well as *Vagbhata* under *Sadhya Vyadhi*, caused due to affliction of *Vata* and *Pitta Doshas* having symptoms of *Gharshan* (foreign body sensation), *Toda* (pricking pain), *Upadeha* (stingy mucous discharge), *Krichronmeelanimeelana* (difficult in opening and closing eye lids), *Vishushkata* (dryness).<sup>[1,2]</sup> Dry eye is a multifactorial disorder of the ocular surface characterized by symptoms of discomfort, visual disturbance and tear film instability with a potential damage to the ocular surface.<sup>[3]</sup> Approximately 8% of the world population is suffering from dry eye, of which 80% of women. A number of factors affect the severity of dry eye syndrome, include Dry, Dusty, smoky, windy atmosphere, working on computer or watching TV for long period, old age and menopause in women are known risk factors.<sup>[4]</sup>

**TEAR FILM TEST (schirmer test)**

It measures the total tear secretion. This test white filter paper strips (41 whatman) of 35mm in length and 5mm

width are used. They are folded 5mm at one end and proparacaine or tetracaine eye drops 0.5% 2 drops are topical anesthesia are instillation in each eye. The folded end is kept in the inferior fornix at the junction of the middle and lateral third of the lower lid and allowed to remain in this position for 5 minute with the eyes open. The patients should be comfortably sitting in a dim lit room away from direct air source as the fan. After the end of 5 minute, the wetting of the filter paper is measured.<sup>[5]</sup>

Normal value – more than 15 mm.

Mild to Moderate – 5 to 10 mm.

Severe – less than 5 mm.

(A Secretion of less than 5 mm suggests dry eye).

**CASE PRESENTATION**

A 40 years old men presented at the OPD with the chief complaints, dryness of Eye. the associated complaints are burning sensation, lacrimation in the eye in the Initial stage, redness in the both eye since 1 year. No history any major illness / Diabetes / Heart disease. Family history are normal .He was already under the Treatment ophthalmologist, he was diagnose as conjunctiva xerosis and he was using supplement drops and multivitamins.

He did not get relief. So he consultant. The *Ayurveda netra roga* department on examination the patients. I decided to go for *netra tarpan*.

O/E – Agni was Mand, Prakruti - Kapha-Pittaja, Weight- 60kg, Height- 5'6, No any abnormal finding seen in general and systemic examination.

### TREATMENT PROTOCOL

Patients was treated in OPD basis. *Ayurvedic* drugs – *Patoladi Ghrita* -20 ml / 3 sittings/ 5 days/ Topical morning Times. I conducted the Schirmer test for right eye, the first Schirmers test came out to be 4 mm, suggest dry eye. So I planned *Netra Tarpan* for one month. During this period and one month follow up after treatment. He was advised for *Laghu Supachya Ahar*. Before start the Treatment *Pachana with Deepana* with *Panchakol churna* 3 gm before meals one day. *Triphala Churna* 3 gm night time for *Kostha shudhi*. Again start the *Netra Tarpan* with *Patoladi Ghrita* 15-20 ml applied for 20-25 min for 5 days for 3 sitting with a gap of 5 days between two sittings.

**About the medicine:** *Patoladi Ghrita* is classical formulation that *Vata, Pitta, Kapha doshas* balanced. This medicine is in form of *Ghee*, where *ghee* is its base ingredient. This study was purchased from approved *Ayurvedic Pharmacy*.

**Ingredients:** Take 48 gm of each ingredients.

*Nimba* – *Aziderecta indica*

*Patola* – *Trichosanthes dioica*

*Katuka* – *Picrorhiza kurroa*

*Darvi* – *Berberies aristata*

*Sevya* – *Vetiveria zizanioides*

*Triphala*- *Haritaki, Vibhitaki, and Amla*

*Vrisha* – *Adhatoda vasica*

*Dhanvayasa* – *Alhagi pseudalhagi*

*Trayanti* – *Gentiana kurroa*

*Parpata*- *Fumaria indica*

*Amla* – *Embelica officinalis*

Water for decoction – 12.288 liters, boiled and reduces to 3.072 liters

*Ghrita* – 768 gm

### Take about 24gm of each of given below ingredients

*Musta* – *Cyperus rotundus*

*Bhunimba* – *Andrographis paniculata*

*Yashtimadhu* – *Glycyrrhiza glabra*

*Kutaja* – *Holarrhena antidysenterica*

*Udichya* – *Pavonia indica*

*Chandan* – *Santalum album*

*Pippali* – *piper longum*.

This drug contains *Tikta-Katu Rasa, Laghu- Ruksha* – *Guna, Katu* – *Vipaka, Ushna* – *Veerya*, Effect on *Tridosha* : *Balances Kapha and Pitta*.

**Principle:** in this herbal *ghee*, the herbs are infused in the medium of of *ghee* along with herb water waste decoction. Then the solid waste herb material is filtered

out. Thus this herbal *ghee* contains oil soluble and water soluble phyto-active principle of medicinal herbs.

*Patoladi Ghrita*

Reference: *Ashtangahrudayam Uttarasthana* 13 / 6-9.<sup>[6]</sup>

**Tarpan Procedure:** Among all *kriyakalpa*, *tarpan* is attributed with most promising and potential benefits in various eye disease. It can be done either in early morning or evening, only after The digestion of any food taken previously. The patients is asked to lie down on his back, in a chamber free from direct sun rays, wind, and dust and is given local application of sesame oil (*Tila taila*) around the eye orbit followed by mild sudation with a cotton soaked in lukewarm water is given as preparatory procedure (*Purvakarma*). Then boundary is made around each orbit with paste of powdered *Maasha* Pulse (black gram). The height of this wall should be two *Angula*. The patients is asked to close the eye and over the closed eye 20-25 ml lukewarm medicated clarified butter (*Ghrita*) is poured very slowly till the entire eyelashes are covered for approximately 20-25 minute period. The patients is instructed to blink slowly (*Unmesha & Nimesha*) during the procedure. After prescribed period *ghrita* removed with cotton pads or drain out near the outer canthus and the eye is irrigated by lukewarm water fomentation. After finishing the main procedure of *tarpana, Dhoompana* i.e. medicated smoke is given to the patient. Then patients are advised to avoid direct exposure to the excessive cold, heat, wind, lustrous and shiny things.<sup>[7]</sup>

### Indication of Tarpana

- When patients see darkness in front of eye.
- In severe dryness of the eye.
- Roughness of the eye.
- Stiffness of the eye.
- Falling of the eyelashes.
- Dirtiness or luster of the ocular surface.
- In extreme aggravation of the disease of the eye.<sup>[8]</sup>

### RESULT

**Table Effect of therapy Subjective parameters.**

Signs & Symptoms	BT	AT		
		1 sitting	2 sitting	3 sitting
Ruk (pain)	2	2	1	0
Daha (burning)	3	3	2	1
Dryness	3	2	2	0
Foreign body sensation	3	2	1	0
Itching	4	3	2	1
Redness	3	2	1	0

### • Pain in eye

0 – No pain

1 – Occasional pain

2 – Intermittent pain

3 – Continues pain

4 – Severe pain

- **Burning sensation**

- 0 – Normal
- 1 – Occasional
- 2 – Intermittent not required to close the eye
- 3 – Continues required to close the eye suddenly
- 4 – Severe

- **Dryness**

- 0 – Absent
- 1 – Occasionally present
- 2 – Intermittently and mild feeling of dryness
- 3 – Frequently and moderate feeling of dryness
- 4 – Feeling of dryness all the time and severe

- **Foreign body sensation**

- 0 – Absent
- 1 – Occasionally

- 2 – Intermittently mild present
- 3 – Frequently moderate present
- 4 – Severe and almost all the time

- **Kandu**

- 0 – Absent
- 1- Occasionally
- 2 – Intermittent not required to rub
- 3 – Continue which required to rub
- 4 – All the time required to rub eye

- **Redness**

- 0 – Normal
- 1 – Mild congestion
- 2 – Moderate congestion
- 3 – Severe congestion

**Table: Effect of therapy Objective parameters.**

Examination	BT	AT		
		1 Sitting	2 Sitting	3 Sitting
Schirmer's test	4mm/5 min	8 mm/5min	10mm/5min	15mm/5min
TBUT (Tear film break up time)	8 second	10 second	12 second	13 second

## DISCUSSION

*Acharya Charaka in Sutrasthana Snehadhyaya* explained that “*Snehoanilam Hanti*” which means the *Snehana* is the best treatment for Vata Dosh.<sup>[9]</sup> *Ghritha* has quality of passing into minute channels of the body. Its process *sheeta veerya*, hence the eye being the site of *Alochaka Pitta* can be effectively managed by constantly using Ghee having *Balya, Brimhana, and Rasayan*, qualities. So it gives strength to the overall Tissue. Ghee contains approximately 8% lower saturated fatty acids which make it easily digestible. The ingredients of drugs are mixed are *Ghritha* and they are easily absorbed. Lipophilic action of *Ghritha* Facilitates transportation to a target organ and final delivery inside the cell. Because cell membrane also contains lipid. This Lipophilic nature of *Ghritha* facilitates entry of drug in eyeball through corneal surface since corneal epithelium is also permeable to lipid soluble substances cross corneal epithelium. Irrespective of their molecular size. *Ghritha* Preparation used is *Tarpan* is in the form of suspension containing Different particles of the drugs and particle do not leave the eye as Quick as solution. *Ghritha* are used widely for *Tarpan* which contains Mainly Omega -3 fatty acids, VitA,E,K & antioxidants.

## CONCLUSION

Dry eye syndrome is abundant in today's world and dry eye is a disorder of tear film due deficiency of tear or excessive tear evaporation which cause damage to the interpalpebral ocular surface. *Tarpan* procedure the lipophilic nature of the *Ghritha* enters inside the cells of eye, helps to maintain the normalcy of the ocular tissue by reducing the dryness of the eye. The *Patoladi Ghritha* contains *Tikta-Katu rasa, Laghu-ruksha guna, Katu vipaka, Ushna veerya* these property is helps to lubricates

the tissue. *Chakshushya and Brimhana* property of the drugs improve the acuity of vision. The present study has that *Tarpan with Patoladi Ghritha* in dry eye syndrome – *Sushkakshipaka* has the best result without any adverse effect.

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