

CLINICAL EVALUATION OF EFFICACY OF MAHATRIPHALADYA GHRITA IN MANAGEMENT OF DRY EYE SYNDROME (SHUSHKAKSHIPAKA)

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ABSTRACT

Background & Objectives: *Shalakyata Tantra* is one of the branches of *Astanga Ayurveda* and *Netra roga vinyana* is its sub division. *Shushkakshipaka* (Dry Eye Syndrome) is one of the *Sarvagatha Netra rogas* characterized by *Gharsha* (Irritation), *Kunita* (Photophobia), *Avila Darshana* (Blurred vision), *Toda* (Pricking type of pain), *Daha* (Burning sensation) and *Raktharaji* (Congestion). All these symptoms can be correlated to the symptoms of Dry Eye Syndrome. Objective of the present study was to evaluate an observational study of *Mahatriphaladya Gritha Tarpana* in the management of Dry Eye Syndrome (*Shushkakshipaka*). **Methods:** 50 patients fulfilling the inclusion criteria Dry Eye Syndrome were randomly selected and subjected to the trail. **Source of patients:** Patients were selected randomly from O.P.D and I.P.D of Shalakyata tantra, S.D.M. Ayurvedic College, Hassan. Clinical signs and symptoms were given with suitable scores according to their severity and assessment was based on relief after treatment. The results having P value less than < 0.001 were considered as statistically significant in this study. **Results:** Complete remission (100% relief) was seen in 12%, Marked Improvement in 32%, Moderate Improvement in 34%, Mild Improvement was seen in 18% patients. **Interpretation & Conclusion:** *Mahatriphaladya Gritha* showed significant result in relieving all the symptoms of *Shushkakshipaka* with maximum of 92% and minimum of 36 %.

Key words: *Ayurveda, Shalakyata, Mahatriphaladya Ghrita, Tarpana, Shamana Sneha, Shushkakshipaka, Dry Eye Syndrome*

INTRODUCTION

*Shushkakshipaka*¹ is one among “*Sarvagata Netra Rogas*”² mentioned by *Sushruta* as well as *Vagbhata* under *Sadhya Vyadhis*, caused by *Vata* and *Pitta Doshas* having symptoms of *Gharsha, Toda, Bheda, Upadeha, Krichronmeelan, Vishushkata, Rooksha Daruna Vartma*³ etc.,

Among many eye diseases, which have been identified by the ancient classics of Ayurveda as well as modern medicine,

the *Shushkakshipaka*, which has been considered as on par with ‘Dry eyes’ in modern medicine, is a major one.

Dry eye conditions⁴ are a spectrum of disorders with ranging from mild eye strain to Foreign Body Sensation, Pain, Burning, with sight threatening complications. Patients can have considerable discomfort with this affliction, which can interfere with normal routine functioning.

*Tarpana*⁵ is one among the all important *Kriyakalpas* which gives nourishment to the eyes and cures the *Vata Pitta* disease⁶. It is very much essential in the management of *Shushkakshipaka*. *Mahatriphaladya Ghrita*⁷ is the important formulations which is indicated in *Netrarogas* because of its *Chakshushya* and *Rasayana* properties. In the present study, it is used for *Tarpana* and as *Shamana Snehana*⁸.

AIM OF THE STUDY

✓ To evaluate the effect of *Mahatriphaladya Gritha Tarpana* and

✓ *Mahatriphaladya Gritha* as *Shamana Snehana* in *Shushkakshipaka*.

Source of data: Patients were selected from outpatient department and in patient department of Shalaky Tantra, SDM college of Ayurveda and Hospital, Hassan.

1. Preparatory Phase

Day 1 and 2 (*Dipana*): *Hingvashtaka Churna*⁹ 3-5 gm before meal twice a day with lukewarm water

Day 3 and 4 (*Snehapana*): *Go Gritha*¹⁰ 30ml early morning in empty stomach

Day 5 (*Virechana*): *Gandarvahastadi taila*¹¹ 30 ml early morning in empty stomach

2. Treatment phase: *Mahatriphaladya Tarpana* and as *Shamana Sneha*.

Shamana Sneha:

Dose : 15 ml twice daily

Anupana : Luke warm water

Method of preparation of *Maha Triphaladya Ghrita*:

Mahatriphaladya Ghrita is prepared as per the classical preparation of *Ghrita*.

Inclusion criteria:

- Patients of either sex aged between 35-70 years

- Patient presenting with the symptoms suggestive of Dry Eye Syndrome like irritation, foreign body sensation(sandy), feeling of dryness, itching, ocular discomfort, etc.
- Tear film break up time less than 10 secs
- Schirmer's 1 test positive <10 mm.
- Rose Bengal staining showing devitalized epithelium of conjunctiva and mucus plaques on the cornea

Exclusion criteria:

- Severe cases of Dry Eye Syndrome with complications like perforated Corneal ulcer, Uveitis, Glaucoma.
- Inflammatory conditions like Acute Conjunctivitis
- Systemic diseases causing Dry Eye Syndrome
- **Follow up:** The follow up was done for 16 weeks for once every two weeks.

ASSESSMENT OF RESULTS:

Effect of the therapies was compared before and after the treatment on the basis of Visual Analogue Scale for the subjective parameters and objective parameters.

Subjective Parameters

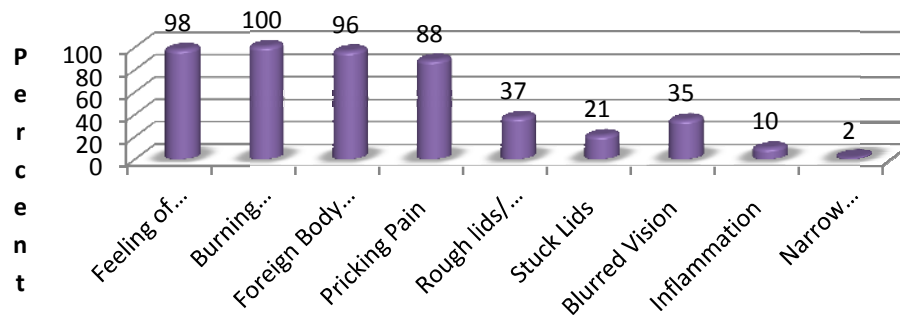
- Feeling of dryness
- Burning sensation
- Foreign body sensation
- Pricking pain
- Rough lids/ mucoid discharge/blepharitis
- Stuck lids
- Blurred vision
- Inflammation / redness
- Narrowing palpebral aperture

Objective Parameters

01. Schirmer's Test 1¹².
02. Tear film Break up Time¹³

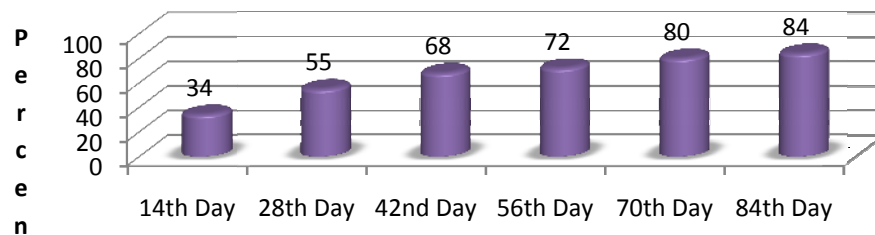
OBSERVATIONS

Severity of the overall Symptoms of Dry Eye

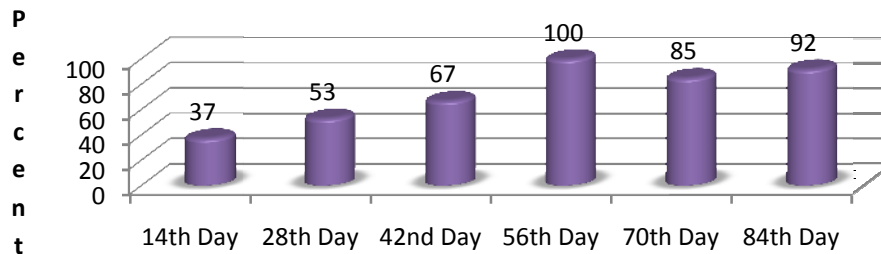


RESULTS

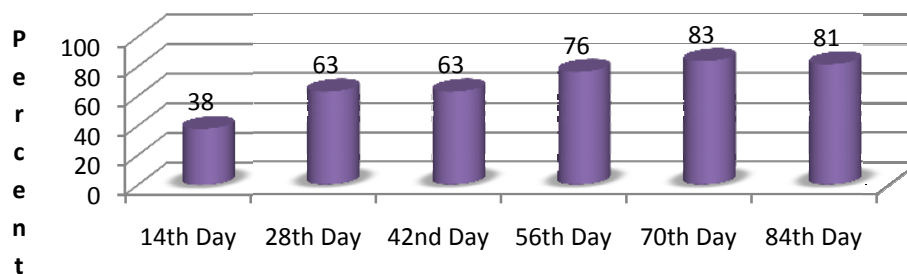
Improvement in Feeling of Dryness

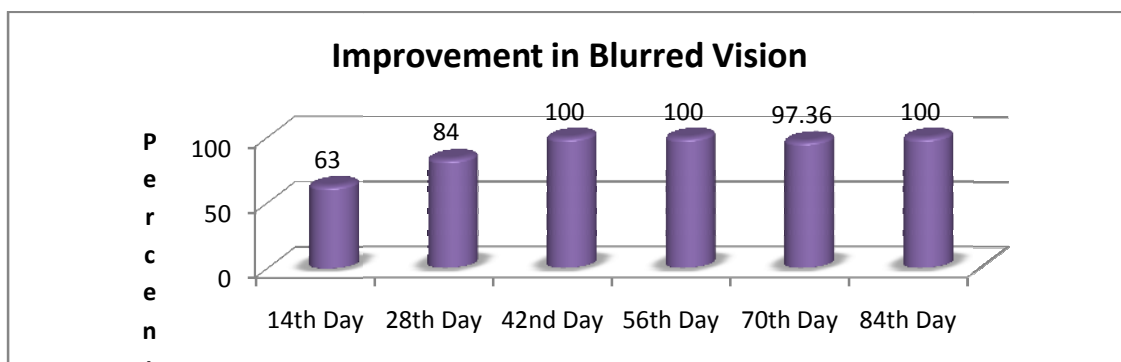
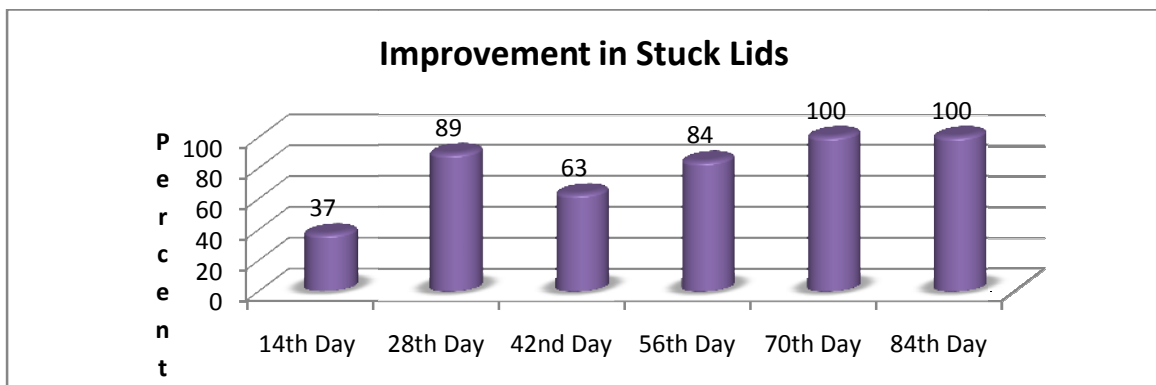
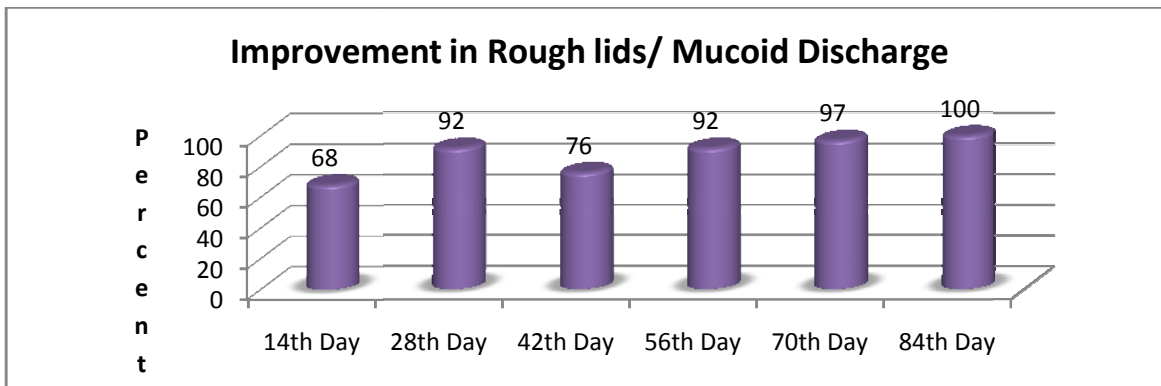
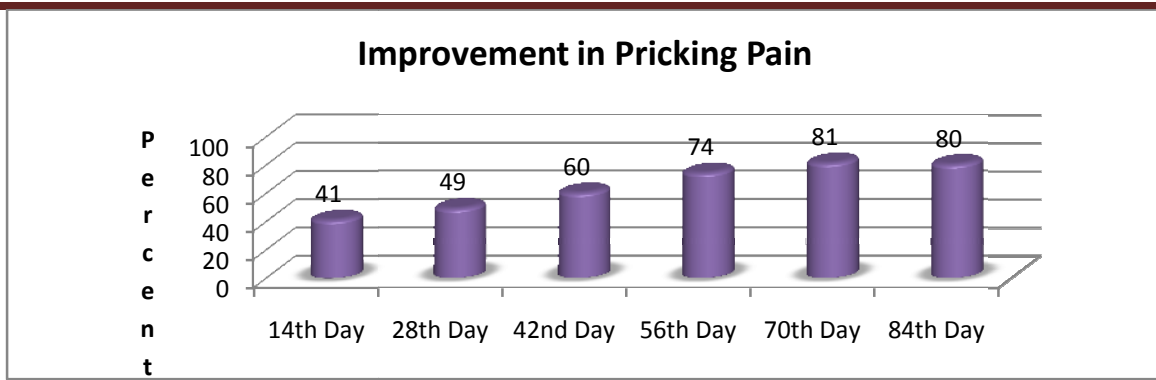


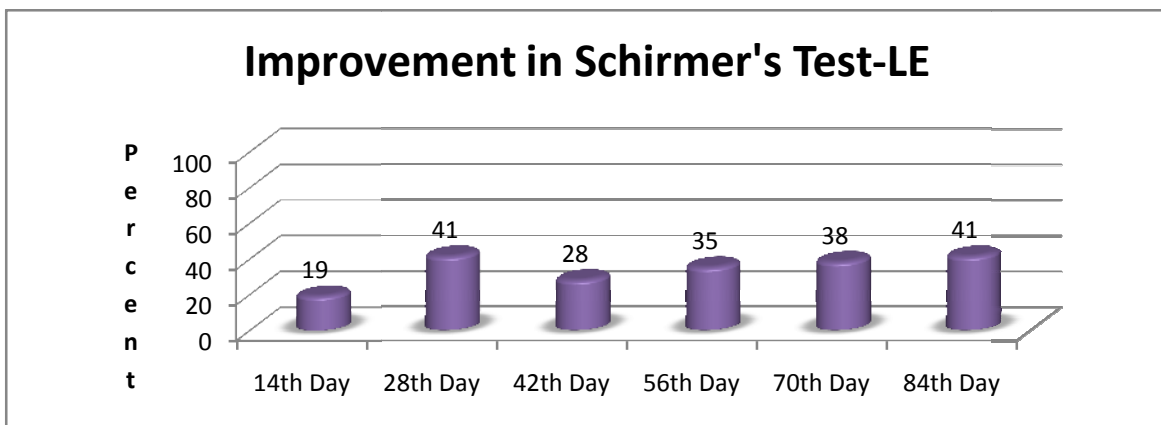
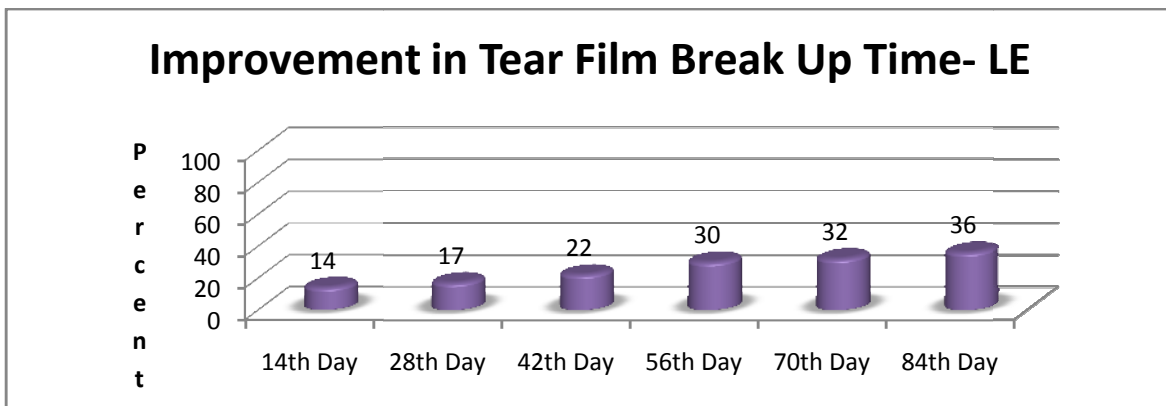
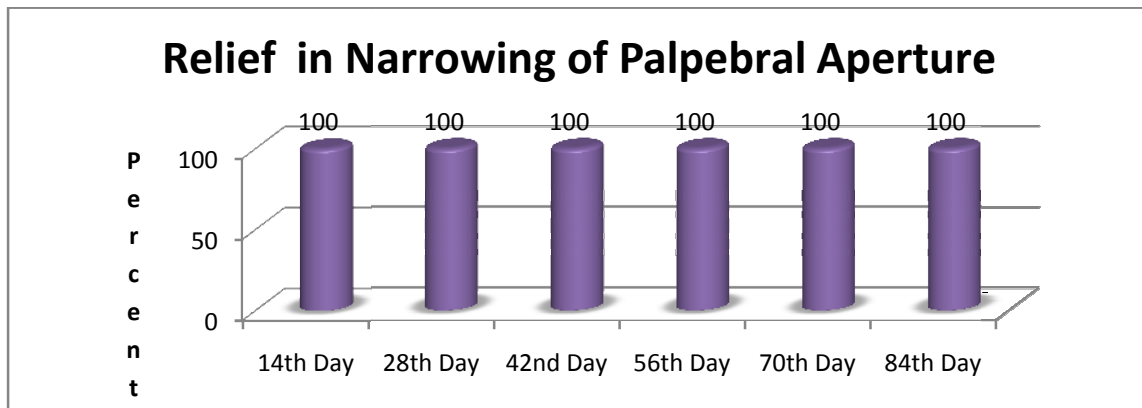
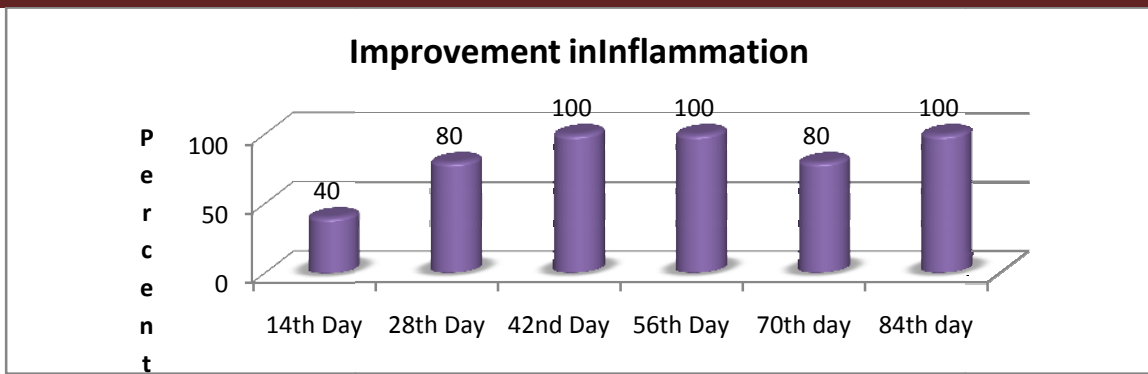
Improvement in Burning sensation



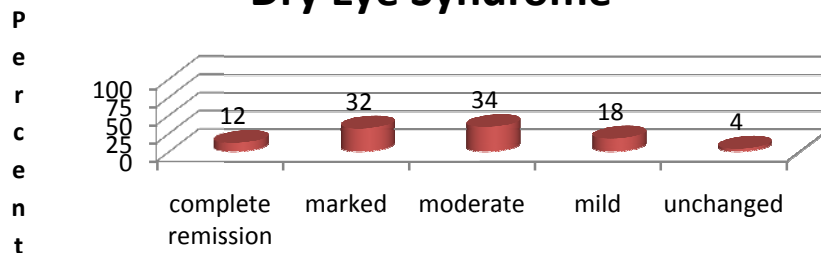
Improvement in Foreign Body sensation







Overall Effect of Mahatriphaladya Gritha on Dry Eye Syndrome



DISCUSSION

Mahatriphaladya Gritha as being the best immunomodulator, it confers anti-inflammatory activity and in dry eye syndrome thereby prevents T-cells from releasing cytokines (primarily interleukin - 6) that incite the inflammatory component of dry eye.

Contemporary tear substitutes stimulate the cell surface glycoproteins that maintain ocular hydration and mucoadhesive property due to lipid content in it.

The degree of contact time with the ocular surface of tear substitutes generally ranges from 1.5mL pas (Pascal seconds, a standard of measurement for viscosity) to 15 mL pas, with an average of 5.0 mL pas which are available in markets.

Compared to these artificial tear products, as *Triphala Gritha* is rich in lipid content which reflects mucoadhesive properties and therefore the degree of contact time with the ocular surface is greater. Hence, the effect of *Tarpana* is better as it has got contact time more than 20 minutes.

Tarpana stimulates the reconstruction of the tear film and the *Shothahara* property of *Mahatriphaladya Gritha* reduces the inflammatory changes due to *Shushkakshipaka*.

CONCLUSION

Thus, *Mahatriphaladya Gritha* controls the inflammation, reconstructs the tear film, thereby producing optimal hydration in the eye offering a promise of long lasting relief to patients with moderate to severe dry eye symptoms.

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