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# A CLINICAL STUDY ON EFFICACY OF ELA CHURNA PRATISARANA IN THE MANAGEMENT OF BLEPHARITIS

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#### ABSTRACT

*Krimi Granthi* is one of the most common ocular disorders encountered in the clinical practice. It is explained under *sandhigata netrarogas* (Junction between two ocular structures) which is *kapha pradhana* and mainly affects *pakshama vartma sandhi* (junction of eye lashes and lid) associated with *lakshanas* like *Kandu* (Itching), *Osha* (Burning sensation), *Pakshmapota* (Cracking of skin/ ulcer), *Pooyasrava* (Pus discharge) and *Granthi* (Cystic swelling) which are similar to that of Blepharitis. It is often misdiagnosed because of co-morbidity with other ocular surface disease like dry eye disease and allergic conjunctivitis. Blepharitis may lead to complications if not treated properly at times. *Ayurvedic* treatment modalities specially indicated in *Krimi granthi* are *swedana* (fomentation), *bedhana* (incision) and *pratisarana* (local rubbing). Objectives are to evaluate the efficacy of *darvi seka* and *Ela churna Pratisarana* after *darvi seka* in the management of *Krimi Granthi* w.s.r. to Blepharitis. An observational study has been conducted on patients (n=10) of Shalakyatantra outpatient department of *Krimi Granthi*. The present study has come out with promising results in the reduction of signs and symptoms of anterior Blepharitis. However a clinical trial on large sample with long duration of follow up is necessary to establish the efficacy of *Pratisarana* as a procedure of choice and to analysis the recurrence rate after treatment.

KEYWORDS: Krimi Granthi, Blepharitis, Darvi Seka, Ela churna, Pratisarana.

#### INTRODUCTIONS

In Shalakya Tantra Netraroga vijnana is given prime importance "Sarvendriyaanaam Nayanam Pradhanam", because vision is the means of knowledge perception. In our classics Krimi Granthi is explained as one of the nine Sandhigata Netra roga.<sup>[1]</sup> It is a common clinical condition comes across in general ophthalmic practice, which can be correlated to Blepharitis. It is characterized by inflammation of the lid margin. Which is common in all age groups, both the sexes and in all races. It is not sight threatening but can be particularly troublesome since it can occur. If untreated it leads to complications such as conjunctivitis, keratitis, ectropion and trichiasis.

#### Nidana

Sushrutha describes the etiological factors of eye diseases in detail. Vagbhata in Astanga Hridaya describes the etiological factors grossly by saying that all the dosha prakopa karanas especially those, which are 'Achakshushya' causes eye diseases. Etiological factors told for Netra roga holds good for Krimi Granthi, as separate nidanas are not mentioned for it.

#### Samprapti

Due to nidana, the Kapha pradhana Tridosha get vitiated, produces Krimi in Pakshma Varthma Sandhi,<sup>[2]</sup> and exhibits the disease with the symptoms like Kandu, Pooya sravi, Granthi, Daha, which then spreads towards inner aspect of eye (to the Varthma Shukla Sandhi) and produces different symptoms and complications of eye.

Sushruta explained Krimi Granthi as a disease characterised by itching at Varthma Pakshma Sandhi due to the presence of Krimi which then moves towards inner aspect of eye to the Varthma Shukla Sandhi there it vitiates and produces different symptoms and further causing Anthaha Nayana Dooshana.<sup>[3]</sup>

#### Samprapti ghataka

• **Dosha**: Kaphaja,<sup>[4]</sup>(Susrutha) Pitta kapha,<sup>[5]</sup> (Videha) Tridhoshaja,<sup>[6]</sup> (Y.R)

- **Dushya**: Twak, Raktha, Mamsa
- Adhistana: Pakshma varthmasandhi,<sup>[7]</sup> (susruta) Varthma shuklasandhi,<sup>[8]</sup>(Dalhana)

Kaneenaka and apanga sandhi,<sup>[9]</sup> (vagbhata)

• Rogamarga: Madyama

# The lakshanas of Krimi Granthi As per Vagbhta acharya,

- Kandu (in apanga or kaneenaka sandhi),
- Osha (localised burning sensation)
- Pakshma pata (falling of eye lashes)
- Pooyasravi (Purulent secretion from the granthi)
- Granthi formation (cystic swelling)
- Krimi (worm infestation)
- Arti (Pain)
- Antharnayana dooshana (spreading infection in deeper structure like cornea, conjunctiva) added point as per Sushrutha samhitha, Madhava nidana, Bhava prakasha, Yogaratnakar, Gadanigraha

#### Treatment principle in Krimi Granthi

*Krimi Granthi* is a *Bhedana Sadhya Vyadhi*. And treatment principles described by *Acharyas* is *Mrudu Sweda*, *Bhedana and Pratisarana*.<sup>[10]</sup>

In this study *Shamana Chikitsa is done, like Mrudu Sweda* - Light fomentation at the site is done by Darvi kashaya,<sup>[11]</sup> followed with *Aushada Pratisarana* with Ela churna.<sup>[12]</sup>

#### AIM OF THE STUDY

- 1. To evaluate the efficacy of Ela churna in the management of Krimi Granthi (Blepharitis)
- 2. To evaluate the efficacy of Pratisarana in the management of Krimi Granthi (Blepharitis).

## METHODOLOGY

- Study Design A single arm controlled open label observational study.
- Sampling Technique the subjects who fulfilled the inclusion & exclusion criteria & complying with the informed consent were selected.
- Sample size 10

#### Inclusion Criteria

- Patients presenting with the clinical features of Krimi Granthi
- Patients presenting with signs and symptoms of Blepharitis
- Patient with in the age group between 11 to 80 years.

#### **Exclusion Criteria**

- Associated with psoriasis and any other skin diseases.
- Posterior Blepharitis
- Patients with systemic disorders that may interfere with the course of the study.
- Patients suffering with complications of advanced stage Blepharitis such as blepharokeratoconjuctivitis.

#### Diagnostic Criteria

- Patients presenting with the clinical features of Krimi Granthi.
- Patients presenting with signs and symptoms of Blepharitis.
- Slit lamp bio microscopy.

#### **Study Procedure & Duration Table 1: Intervention of the study.**

Intervention	Medicine	Dosage	Duration	
Darvi Seka	Darvi	300	5 dava	
	Kashaya	matrakala	5 days	
Pratisarana	Ela churna	3 minutes	7 days	

#### Method of preparation of Ela churna

Ela beeja soaked with aja mutra for three days, where aja mutra was replaced with fresh ajamutra on daily bases. 4<sup>th</sup> day ela beeja was filtered and dried completely under the shade and powdered. Fine powder was collected and stored in air tight container.

#### **Material Required**

- Sterile Boul, Churna12-15 gms.
- Cotton, Mask, Paper sheet.

#### Purva Karma

- Patient was made to sit comfortably.
- Patient was informed about the procedure.
- Patient was made to wear mask & hold paper at the neck level.
- Patient was instructed not to open the eyes during the procedure.

#### Pradhana Karma

- Eye was wiped with hot water soaked cotton and left for drying.
- Between index and thumb finger taking the dravya, gently rubbing over eye lid margin
- 5 strokes to and fro from outer canthus to medial canthus for upper and lower eye lids.
- Left for drying for about 10 minutes.

#### Paschat Karma

- After 10 minutes Pratisarana dravya was removed with the help of sterile hot water soaked cotton from the eyelid.
- Patient was advised to avoid exposure to outside dust, smoke etc. to prevent the Allergic manifestations.
- The patients were also advised to maintain proper eyelid hygiene.

#### **Criteria For Assessment Of Treatment**

The improvement in the signs and symptoms was observed daily before applying the Pratisarana. Following symptoms were assessed

# Table 2: Gradation index.

Parameter	0	1	2	3
Itching of eyelids (Kandu)	No itching	Occasional itching sensation	Intermittent itching sensation which requires rubbing of eyes	Most of the time intolerable itching which would require significant eye rubbing
Burning sensation (Daha)	No burning sensation	Occasional burning sensation	Intermittent burning sensation	Most of the time burning sensation
Lacrimation (Srava)	No lacrimation	Occasionally, tear flow out of eyes	Intermittent out flow of tears 4-5 times / day on exposure to wind or doing some work	Most of the time out flow of tears
Photophobia (Prakasha Asahishnuta)	No photophobia	photophobia on exposure to very bright light	photophobia on exposure to torch light	photophobia experienced even in daylight
Falling of eyelashes (Pakshma Hani)	No falling of eyelashes	No Change in the pattern of arrangements	falling of eye lashes with loss of density in arrangements of hair	Wide gaping between the lashes
Congestion of lid margin ( <i>Raga</i> )	No Congestion	Congestion, visible on slit lamp examination	Congestion, visible on torch light examination	Congestion, visibly evident on direct inspection
Scaling (Upadeha)	No scaling	scaling, visible on slit lamp examination	scaling, visible on torch light examination	scaling visibly evident on direct inspection
Lid Margin oedema ( <i>Shopha</i> )	No lid margin oedema	Lid margin oedema visible on slit lamp examination	Lid margin oedema visible on torch light examination	Lid margin oedema visibly evident on direct inspection

## **OBSERVATIONS AND RESULTS**

- 10 patients of Krimi Granthi were registered for this clinical study.
- Patient between the age group of 11-30years & 41-60 years were more.
- 50% of them were males.

# Table 3: Effect of Treatment (AT1, AT2, AF).

- 80% of the patients were belong to middle socio economic status.
- 100 % patients were from urban place.
- 40 % patients were business men, remaining were students-30% as well as house wife's- 30%
- 50% patients had a chronicity of <\_6 months to >\_ 1 year.

	Ν	BT-AT1	BT-AT2	BT-AF	T value	Remark
Itching	10	0.6	1.8	1.8	7.21	<0.001, HS
<b>Burning Sensation</b>	5	1.0	1.2	1.8	8.04	<0.001, HS
Lacrimation	5	0.6	1.2	1.8	8.97	<0.001, HS
Photophobia	5	0.6	1.4	1.6	4.99	<0.001, HS
Congestion	6	0.8	0.8	1.6	6.99	<0.001, HS
Falling of eye lashes	1					
Scaling	7	0.5	0.8	1.5	7.77	<0.001, HS
Edema	6	0.5	1.1	1.5	6.70	<0.001, HS

After Darvi kashaya seka there was Highly significant result observed in Itching & Hyperemia, Significant result in terms of Burning Sensation, Lacrimation, Photophobia, Scaling & Edema. After Ela churna Pratisarana & on follow up there was Highly significant result observed with increased t-value in all the parameters.

**NOTE:** Falling of eye lashes was present only in single patient, so here not considered for statistical evaluation.

#### Probable Mode Of Action Of Chikitsa

- Daruharidra has the property like- shothahara, vranaropaka, raktasodhaka, kaphapittagna, twakdoshara and also useful in eye disorder. Thus, by Darvi kashaya seka, the sign and symptoms were reduced.
- In Pratisarana mrudu Sweda was applied over eyelid with a tip of finger to loosen the crusts and to irrigate Dosha followed by a pratisarana.
- Ela churna, having kashaya, madhura rasa & laghu, ruksha guna also being pittashamaka. Thus it pacifies the vitiated pitta & also corrects the vitiated kapha doshas. Also Aja mutra is pathya. Means which is not harmful for body channels, it targets kapha and due to its ushna veerya it subsides vitiated vata dosha.

#### DISCUSSION

- In this study maximum numbers of patients were exposure to dust, smoke and other chemical fumes.
- Pratisarana provides comfort at the site due to temperature created. The heat causes the blood vessels to dilate, which increases blood circulation and promotes healing, evacuation and cleansing of the secretary passages. The pressure effect and the heat produced by the procedure enhance the absorption of the medicine through the lid margin skin.
- As Ela churna has Tridosha hara, Vatanulomana, pitta Samsodhaka, Dipana, Netra roga hara, Krimi rogahara, Shopha hara, Visha hara, Kandu hara, Nadi shodhaka property. Which also behaves as antioxidant, anti-bacterial, anti-microbial & antiinflammatory helps in relieving signs & symptoms.

#### CONCLUSION

- Krimi Granthi can be correlated to Blepharitis.
- Kapha Pitta vitiation and Krimi is responsible to cause this disease in Pakshma varthma sandhi.
- Pratisarana is a simple procedure and can be practiced even in OPD levels.
- Ela churna Pratisarana was found to be very effective in the management of Krimi Granthi.
- No side effects of the drug & the procedure were observed during the course of study.
- There was a highly significant result found at follow up.
- Further clinical study has to be carried out in the large group of patients.

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