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Case Study

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# TRIPHALADI PRATISARANA SHEDDING LIGHT ON HOLISTIC AYURVEDIC CARE FOR PRAKLINNAVARTMA (BLEPHARITIS) – CASE STUDY

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#### **ABSTRACT**

Triphaladi Pratisarana is a key element of holistic Ayurvedic care for Praklinnavartma, known as Blepharitis. This case study sheds light on its effectiveness as a comprehensive therapeutic approach. We present a detailed analysis of a patient with Praklinnavartma, who underwent Triphaladi Pratisarana treatment. Our findings reveal significant improvements in symptoms, including eyelid inflammation, itching, and redness. Through this study, we explore the principles behind Triphaladi Pratisarana and its potential as a holistic solution for managing Praklinnavartma (Blepharitis) in the realm of Ayurveda. This research contributes valuable insights into the practical application of this traditional Ayurvedic therapy for contemporary eye

**KEYWORDS:** Triphaladi Pratisarana, Praklinnavartma, Blepharitis, Ayurvedic care, Holistic solution.

#### **INTRODUCTION**

Ayurveda, one of the world's oldest holistic healing systems, has provided humanity with invaluable insights into maintaining optimal health and well-being for millennia. Rooted in the ancient wisdom of India, Ayurveda offers a comprehensive approach to understanding and treating various health conditions by harmonizing the body, mind, and spirit. Among the numerous ailments it addresses, Praklinnavartma, commonly known as blepharitis, presents a unique challenge in modern healthcare. This chronic and often recurring eye condition affects

millions of individuals worldwide, causing discomfort and visual disturbances. It is often a troublesome condition for patients owing to the long-standing nature of disease and fluctuations in its severity with periods of exacerbations and remissions. The word originates from the Greek word "blepharos", which means "eyelid" and the Greek suffix "itis", which means inflammation. [1] Ayurveda, with its emphasis on personalized care and natural remedies, offers a promising alternative to alleviate the symptoms and promote holistic healing for individuals suffering from blepharitis.

In this case study, we shed light on the Ayurvedic perspective of treating Praklinnavartma and explore the effectiveness of Triphaladi Pratisarana, a traditional Ayurvedic therapy. This holistic approach to managing blepharitis not only focuses on relieving the physical symptoms but also addresses the underlying imbalances within the body that contribute to the condition. By delving into the Ayurvedic principles, the case study aims to provide a deeper understanding of how this ancient system of medicine can be applied in contemporary healthcare, offering a ray of hope to those seeking long-term relief from blepharitis.

#### AIM AND OBJECTIVES

- 1. To evaluate the efficacy of Triphaladi Pratisarana in the management Praklinnavartma.
- 2. To study the Triphaladi Pratisarana.

#### MATERIALS AND METHODS

#### Praklinnavartma (Blepharitis)

The chronic inflammation can cause the damage to ocular surface i.e. to the conjunctiva and cornea because of the intimate relationship between the lids and ocular surface. Out of the two clinical forms of blepharitis ie the anterior and posterior blepharitis, the former is usually affected by staphylococcal species and/or seborrhoea. Anterior blepharitis affects the anterior portions of the lid margin, including the eyelashes. Even though the pathophysiology of blepharitis is poorly understood triad of possible mechanisms underlies anterior blepharitis:

- 1) Direct bacterial infection of the lids.
- 2) Reaction to the presence of endotoxins and/or exotoxins produced by pathogenic bacteria and/or commensal lid flora.
- 3) Cell-mediated delayed hypersensitivity response to bacteria antigens. [2]

Blepharitis is sometimes hard to identify because it often occurs alongside other eye problems like dry eye disease and allergic conjunctivitis. It can also happen at the same time

as skin conditions like rosacea, eczema, and seborrheic dermatitis. Things from the outside, like irritating substances and allergens, can make both types of blepharitis worse. This condition is more common in people over 18, but it can also affect children. [3]

If blepharitis isn't spotted and treated correctly, it can make the symptoms worse. It can mess up the tear film on the front of your eye, make your eyes uncomfortable, affect your vision, and even lead to problems like misdirected or lost eyelashes. It can also cause scarring and changes in the way your eyelids look, which can affect how you feel about yourself. These are common issues that can happen because of blepharitis. blepharitis include blepharoconjunctivitis, hordeolum and chalazion (styes). Complete disease elimination is rarely achieved with the modern line of management which include topical antibiotic ointment like sodium fuscidic acid, bacitracin, chloramphenicol, kenalog etc. and topical weak steroid ointment like flurometholone. Lid hygiene and removal of cause is of great importance regardless of type of blepharitis. [4]

Based on where the problem is in the body, the signs it shows, and the effects it has, we can compare blepharitis to a condition in Ayurveda called "Krumigranthi," which is connected to tiny organisms called "Krumis" or microorganisms. In modern medicine, we know that anterior blepharitis is mostly linked to bacteria, and we've also started to think about parasites like Demodex folliculorum. The symptoms of Krumigranthi are very similar to the signs of chronic blepharitis, like itching, burning, mucoid discharge, and scaling of the eyelids. The description "Apange va kaneene va" is a lot like angular blepharitis. In chronic cases, it's explained that the Krumis can eventually affect the surface of the eye. [5]

### **Drug Reference**<sup>[6]</sup>

The formulation selected for the Pratisarana is mentioned under Krumigranthi chikitsa in Uttarastana of Ashtanga Hrudaya. The ingredients of Pratisarana choorna includes Triphala, Kshaudra, Kaseesa and Saindhava. The Triphala choorna.

Table 01: Ingrediants of triphaladi Yoga.

Ingrediants	Quantity			
Triphala chooorna	10gm			
Saindhava	1 pinch			
Kaseesa	1 pinch			
Kshaudra	Q.S			

#### Preparation of the medicine

All the ingredients are finely powdered and mixed thoroughly to get a uniform mixture. For each Pratisarana drugs have been taken in the following ratio (Table1) The fine powder of Triphala, Saindhava and Kaseesa were mixed in a sterile vessel with the sufficient quantity of honey to get a thick mixture.

#### About the procedure -'Pratisarana'

#### **Procedure**

- The patient is made to sit in a comfortable chair and asked to wear the mask before the treatment.
- The thick paste of Pratisarana choorna was taken in a clean and sterile vessel.
- The medicine was then applied over the eye lid margin and rubbed thoroughly to reach the entire lid.
- The procedure was done for a duration of 5-10 min and repeated for the other eye also.
   Care has been taken to prevent the entry of medicine into the eye while application and rubbing.
- The same procedure is then repeated over the lower eye lid also.
- After the procedure the lid was cleaned using cotton dipped in Triphala kashaya.

#### Study design

Open label clinical trial was conducted on 10 patients fulfilling the criteria for the diagnosis of the disease 'Krumigranthi' -Blepharitis in the present study.

#### **Inclusion Criteria**

- 1) The patients of age 15-50 years were selected
- 2) Patient of all gender
- 3) Patients presenting with Lakshanas of Krumigranthi & signs and symptoms of anterior blepharitis
- 4) Patients fit for Pratisarana
- 5) Blepharitis of recent onset not more than a year.

#### **Exclusion Criteria**

1) Systemic diseases, such as diabetes, hypertension as well as autoimmune diseases including systemic lupus erythematosus, rheumatoid arthritis, thyroid disease, sarcoidosis, psoriasis.

- 2) Patients under medications like beta blockers, diuretics, antihistamines, decongestants, chemotherapy medications, antidepressants, antipsychotic medications, hormonal anti contraceptives as well as hormone replacement therapy given to post-menopausal women
- 3) Associated with other ocular diseases like Dry eye, Computer vision syndrome, Allergic conjunctivitis.
- 4) Blepharitis with complications like blepharoconjunctivitis, hordeolum, trichiasis, tylosis, and chalazion.

#### Intervention

The study was intervened by the treatment - Pratisarana with triphaladi yoga. The patients were advised to follow the measures to maintain lid hygiene as per the protocol.

#### **Treatment phase**

Once daily for 5-10 minutes in each eyelid for 7days.

#### Follow up phase

One follows up has been conducted after 7 days of completion of treatment.

#### **Total duration of study**

Total duration of the study was 14 days.

#### **Criteria for Assessment**

Assessment of the effect of treatment on signs and symptoms have been done based on subjective and objective parameters by adapting a grading pattern before and after the treatment as follows: (Table 2 & Table 3).

#### **Assessment Criteria**

#### Table no 02: Subjective Parameter.

Grading	0	1	2	3
Itching of eyelids	No itching	Occasional tickle sensation not requiring to rub eye	Intolerable itching which would require significant eye rubbing	
Burning sensation	No burning sensation	Occasional burning sensation	Frequent burning sensation	Continuous burning sensation
Soreness	No soreness	Mild soreness	Moderate soreness	Severe soreness
Lacrimation	No lacrimation	Mild lacrimation (only on straining and exposure to light)	Moderate lacrimation which needs occasional mopping	Profuse lacrimation which needs continuous mopping

Table 03: Objective parameter.

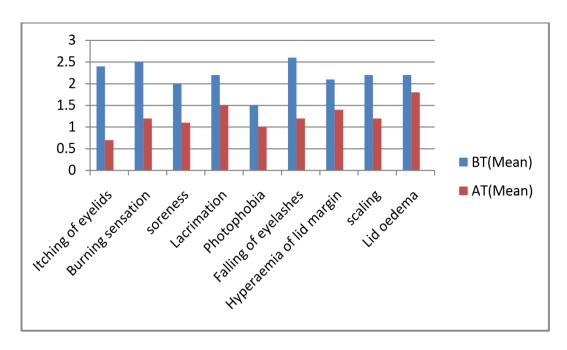
Grading	0	1	2	3	
Photophobia	No photophobia	Mild photophobia on exposure to very bright light	Moderate photophobia on exposure to torch light	Severe disabling photophobia experienced even in daylight	
Falling of eyelashes	No falling of eyelashes	Mild falling of eye lashes especially on rubbing	Moderate falling of eye lashes with diffuse loss of density of hair	Marked loss of eye lashes with wide gaping between the lashes	
Hyperemia of lid margin	No hyperemia	Mild hyperemia, visible on slit lamp examination	Moderate hyperemia, visible on torch light examination	Severe hyperemia, visibly evident on direct inspection	
Scaling	No scaling	Mild scaling, visible on slit lamp examination	Moderate scaling, visible on torch light examination	Severe scaling visibly evident on direct inspection	
Lid oedema	No lid oedema	Mild lid oedema	Moderate lid oedema	Severe lid oedema	

#### **OBSERVATION AND RESULT**

It has been observed that, the symptoms like scaling were the symptoms presented by all the itching of eyelids with pre-treatment mean score 2. 4 patients and there was apparent reduction in both has been improved to mean 0. 7. Burning sensation of these symptoms post treatment. Lid oedema which was eyelid has been reduced considerably from the pre to before treatment (mean=2.6) reduced considerably post treatment by 50%. But there was no much (mean=1.2) On applying statistical test before and after remarkable reduction in photophobia and falling of eye the treatment, symptoms like itching, burning lashes between pre & post treatment. The soreness sensation, soreness, hyperaemia of lid margin, scaling which was uncomfortable prior to treatment and lid oedema have shown highly significant result. Refer Table No - 04

Table 4: Statistical analysis Pre & Post Treatments.

S. No.	Variables	n	BT (Mean)	AT (Mean)	SD	SE	't' value	P
1	Itching of eyelids	10	2. 4	0. 7	0. 67	0. 2	8. 056	< 0.001
2	Burning sensation	6	2. 5	1. 2	0.48	0. 19	6. 751	< 0.001
3	soreness	7	2. 0	1. 1	0. 34	0. 12	6. 695	<0.001
4	Lacrimation	6	2. 2	1.5	0.48	0. 20	3. 333	< 0.01
5	Photophobia	4	1. 5	1.0	0.50	0. 25	2.000	>0.05
6	Falling of eyelashes	9	2. 2	1.8	0. 47	0. 15	2. 121	< 0.05
7	Hyperemia of lid margin	10	2. 1	1.4	0. 64	0. 20	3. 458	< 0.001
8	scaling	10	2. 2	1. 2	0. 63	0. 19	5. 025	<0.001
9	Lid oedema	9	2. 6	1. 2	0.50	0.16	8. 674	< 0.001

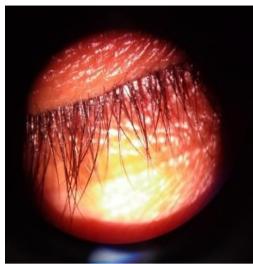


(mean=2.0) has resulted in extending comfort (p<0.001), lacrimation has shown significant reduction (mean=1.1). The lacrimation which was before (p<0.01) and Changes in photophobia was insignificant treatment (mean=2.2) has resulted in considerable (p>0.05). (Table. 4) reduction (mean=1.5). Hyperaemia of lid margin and scaling were the symptoms presented by all the patients and there was apparent reduction in both these symptoms post treatment. Lid oedema which was before treatment (mean=2.6) reduced considerably (mean=1.2) On applying statistical test before and after the treatment, symptoms like itching, burning sensation, soreness, hyperaemia of lid margin, scaling and lid oedema have shown highly significant result (p<0.001), lacrimation has shown significant reduction (p<0.01) and Changes in photophobia was insignificant (p>0.05). (Table. 4).

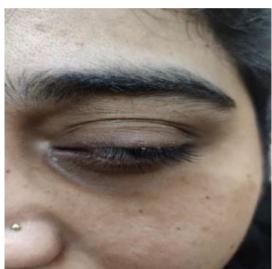


**Right Eye Before Treatment** 





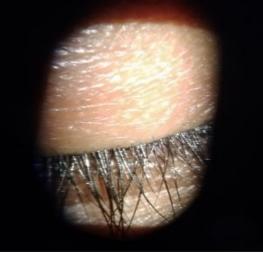
**Right Eye After Treatment** 





**Left eye – Before treatment** 





Left eye – Before treatment

#### **DISCUSSION**

'Krumigranthi' is explained as a Sandhigata roga both in Ashtanga Hrudaya and Susruta Samhita. Acharya Susruta considers it as a Kaphaja vyadhi while Acharya Videha describes it as a Sannipataja vyadhi. The Samprapti of the disease is well explained by Acharya videha as follows; the vitiated Pitta and Kapha forms Granthi on the Vartma shukla sandhi which later on due to Ushma undergoes Pachana and leads to manifestation of Krumis. These Krumis lodges in the Pakshma (eye lashes) and Vartma (eye lid) and vitiates eye.<sup>[7]</sup>

Bhedana is the treatment of choice explained for Krumigranthi. Pratisarana has to be performed after Swedana and Bhedana of the Granthi. The long-standing cases of posterior blepharitis is generally associated with cystic dilatation of meibomian gland wherein Bhedana would be a treatment of choice. Pratisarana alone can be useful in anterior blepharitis where the meibomian cysts or abscess are rare to find out. There is no detailed description regarding the procedure of Pratisarana in the classics. The scattered references in the commentary of Susruta samhia explains the Pratisarana as a procedure of 'Avagharshana' in which the medicine is rubbed or gently massaged against a base.

#### Action of 'Triphaladi yoga'

Triphala is an extensively used formulation in various disorders due to its wide range of action. This renowned formulation is a combination of three fruits Hareetaki (Terminalia chebula), Vibheetaki (Terminalia bellarica) and Amalaki (Emblica officinalis) in equal proportions. In ancient Ayurvedic texts Triphala has been described as a Rasayana having Tridosha hara property. Due to its Rooksha guna, it has promising effect on Srava and Kandu. The Kanduhara property of Triphala is explained in Hareeta Samhita. Vibhitaki is an excellent drug having Kruminasana property. The powder of Triphala is reported to have anti-inflammatory, anti-infective and immunomodulatory action. The immunomodulatory action of Triphala may help in correcting the cell-mediated delayed hypersensitivity response to bacteria antigens which is one of the postulated pathophysiology for blepharitis. The scientific studies on the aqueous extract of Triphala reported its efficacy as an antibacterial agent against staphylococcus aureus which is the main causative organism of blepharitis. Recent extensive research indicates presence of different active compounds in them such as gallic acid, chebulagic acid, ellagic acid, flavonoids, tannins and phenols, which are responsible for its effective immune stimulatory action.

#### Probable mode of action of 'Pratisarana'

'Pratisarana' means to rub or gently massage the medicine against a base. As the medicine is gently massaged or rubbed with tip of the finger into the skin of the eyelid there will be quicker and better absorption. The Pratisarana facilitates the quicker absorption of drug potency (Veerya) through Romakoopa (hair root), Swedavahini, (sweat gland) and Siramukha (vasculature). Hair follicle, sebaceous and sweat glands represent an important shunt route into the skin for topical drugs. The hair follicle infundibulum also has a large storage reservoir capacity, about 10 times more than the stratum corneum. Because of the pressure exerted on rubbing and the deep penetrating properties of the drugs in Triphaladi yoga, it can easily penetrate across the skin of eyelid through the appendageal roots. The thickness and integrity of stratum corneum is an important factor determining the transdermal drug absorption. Thicker skin is a greater barrier to passage of the drug. The skin of eyelid is the thinnest in the body and it measures approximately 0. 05 cm. Because of its extreme thinness the medicine applied over the lid will penetrate deeper when rubbed on to skin. [10]

#### **CONCLUSION**

Blepharitis represents the cutaneous disorder of the eye lid wherein the topical applications like Pratisarana have a great role to impart the clinical success in treatment. The present study carried out establishes the efficacy of Pratisarana in the management of blepharitis as the study has come out with promising results in the reduction of signs and symptoms of blepharitis. However clinical trials on large sample with long duration of follow up is necessary to establish the efficacy of Pratisarana as a procedure of choice and to analyse the recurrence rate after treatment.

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