

Research Article**A Clinical Study on the Effect of *Yoganjana* in the Treatment of *Praklinnavartma* w.s.r. to Blepharitis****Nisha^{1*}, Lokesh², Sanjeev Awasthi³, Kartar Singh Dhiman⁴**¹Lecturer, Department of Shalaky Tantra, Govt. Ayurved College, Rewa (M.P), India²Lecturer, Department of Kaumarbhritya, Govt. Ayurved College, Rewa (M.P), India³Reader & H.O.D Shalaky Tantra, R.G.G.P.G. Ayurved College, Paprola (H.P), India⁴Professor & H.O.D Shalaky Tantra, I.P.G.T & R.A, Jamnagar (Gujarat), India***Corresponding author**

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Abstract: The present study was carried out to assess the effect of *Yoganjana* in the treatment of *Praklinnavartma* (Blepharitis). There are 21 *Vartmagata rogas*, out of which *Praklinnavartma* is a most common ocular disorder. It is an ocular inflammation that involves the eyelid margin primarily and is a common cause of chronic ocular irritation. Blepharitis frequently leads to associated ocular surface inflammation, including conjunctivitis, functional tear deficiency and keratitis. After years it may result in permanent reddening of lid margin, ptylosis, corneal ulcers and visual impairment etc. The high recurrence rate makes blepharitis difficult to manage. The outcome of modern & Ayurvedic management is poor and there are increasing chances of recurrence. “*Yoganjana*” is described in *Sushruta Samhita* for the treatment of *Praklinnavartma*. In the present study 60 eyes of 30 patients were registered and drug was given for 15 days. Among these, 4 patients left the treatment before the completion of the therapy. The observation were made on 7th day & 15th day and finally at 30th day. In the group of 52 eyes of 26 patients, complete remission in 1.92%, marked improvement in 5.77%, moderate improvement in 34.62% were found. Mild improvement was found in 46.15% patients whereas 11.54% patients were remained unchanged.**Keywords:** *Praklinnavartma*, Blepharitis, *Yoganjana*.**INTRODUCTION**

There are 21 *Vartmagata rogas* mentioned in *Susruta Samhita*. Out of which *Praklinnavartma* [1] is a most common ocular disorder. It is an ocular inflammation that involves the eyelid margin primarily and is a common cause of chronic ocular irritation. Blepharitis frequently leads to associated ocular surface inflammation, including conjunctivitis, functional tear deficiency, and keratitis [2]. After years it may result in permanent reddening of lid margin, ptylosis, corneal ulcers and visual impairment etc. The chronic nature of blepharitis, the uncertain etiology, the frequent coexistence of ocular surface disease and high recurrence rate make blepharitis difficult to manage [9].

The outcome of modern & Ayurvedic management is poor and there are increasing chances of recurrence. The test drug selected for the study “*Yoganjana*” [3] is described in *Sushruta Samhita* for the treatment of *Praklinnavartma*. The drug has *Chakshusya* (useful for eyes), *vranashodhan-ropana* (antiseptic and wound healing agent), *lekhan* (scrapping) and *kandughana* properties. The consideration of the gravity of the problem this attempt

has been done to proved scientifically that the medicine is effective in the treatment of blepharitis and avoiding its complications.

Aims and Objectives

- To study *Praklinnavartma* and Blepharitis to find out the correlation between each other.
- To evaluate the efficacy of *Yoganjana* on the course of *Praklinnavartma*.
- To study the side effect/toxic effect of *Yoganjana* if any.

Scope

- To evaluate the effect of *Yoganjana* on the various signs and symptoms of *Praklinnavartma* (Blepharitis).
- To come out with herbomineral formulation in the management of *Praklinnavartma* (Blepharitis).

MATERIALS AND METHODS

Total 60 eyes of 30 patients fulfilling the criteria for the diagnosis of the disease were registered

for the present study. Among these, 4 patients left the treatment before the completion of the therapy. The patients were selected from the O.P.D. of Dept. of Shalaky, R.G.G.P.G. Ayurved College, Paprola.

Group: Single group has been taken.

Dose: Sufficient amount of ointment to be applied on lid margin 3 times/day.

Duration: 15 days.

Follow up: Periodical follow up was carried out after 7 and 15 days.

The assessment was done on the basis of improvement in signs & symptoms and investigation. Assessment of the clinical symptoms depending on the severity was done according to the scoring pattern.

RESULTS

Total 30 patients were registered (there is only one group), amongst them 26 patients had completed the course of treatment and 04 patients left against medical advice. It was found that maximum number of patients i.e. 40% belonged to age group of 11-20 years, female patient 53.33%, hindu 93.33%, 56.67% were vegetarians, 56.67% were from *anupa desha*, 56.67%

were having *madhura rasa pradhan dravya* in diet, 96.67% of patients had *madhyama* appetite, 83.34% of patients had regular bowel, 33.33% of patients had *Vata- Kapha Prakriti* and also *Pitta-Kaphaja Prakriti*, 40% of patients had *Rasa Sara*, 83.34% of patients had *Madhyama Samhanana*, 70% of patients had *Madhyama satwa*, . 80% of the patients had *Madhyama Satmya*, 96.67% of patients had *Madhyama Aharashakti*, 90% of patients had *Madhyama Vyayamashakti*, 50% of patients were of *Kaumara vaya*, 46.67% of patients were suffering from mild pain, 81.67% patients from lid edema, 90% patients from palpebral congestion , 41.67% patients with bulbar congestion , 50% patients had discharge, 90% patients had itching in eyes ,95% patients had scaling on the lid margin , remaining 25% patients had ulcerated lid margin. The study highlights that maximum 80% of patients having dandruff on their scalp.

In the group of 52 eyes of 26 patients, complete remission in 1.92%, marked improvement in 5.77%, moderate improvement in 34.62% were found. Mild improvement was found in 46.15% patients whereas 11.54% patients were remained unchanged.

Table 1: Effect of therapy according to sign & symptoms

Feature	'n'	Mean Score		% Relief	X	SD ±	SE ±	't'	p
		BT	AT						
Mild Pain	22	1.18	0.95	19.23	0.22	0.42	0.09	2.48	<0.05
Lid Edema	44	1.77	1.56	11.53	0.20	0.46	0.06	2.93	<0.01
Palp. Congestion	46	1.54	1.47	4.22	0.06	0.24	0.03	1.77	>0.05
Bulb. Congestion	19	1.10	0.73	33.33	0.36	0.49	0.11	3.24	<0.01
Discharge	26	1.30	1.11	14.70	0.19	0.40	0.07	2.43	<0.05
Itching	48	1.89	0.56	70.32	1.33	1.05	0.15	8.72	<0.001
Scale	49	1.77	0.59	66.66	1.18	0.72	0.10	11.40	<0.001
Ulcer	13	1.38	0.84	38.88	0.53	0.66	0.18	2.94	<0.01

Table 2: Overall effect of therapy on 52 eyes of 26 Patients of *Praklinnavartma*

Effects	No. of Patient's eye	%
Complete remission (100%)	01	1.92%
Marked improvement (75-99%)	03	5.77%
Moderate improvement (50-74%)	18	34.62%
Mild improvement (25-49%)	24	46.15%
Unchanged (<25%)	06	11.54%

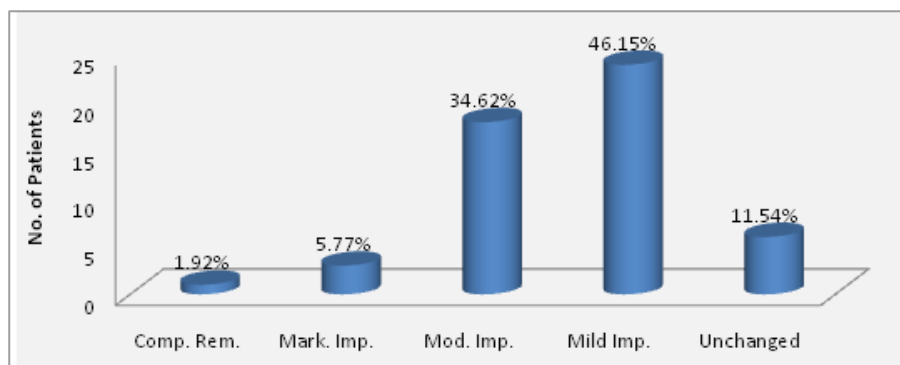


Fig. 1: Overall effect of therapy

DISCUSSION

Praklinnavartma is a disease of *vartma* and is explained by *Acharyas*. In classical texts, a clear explanation of signs and symptoms with a slight variation amongst different authors is available. It is *Kaphaj aushadha sadhya vyadhi* and at the same time various treatment protocols have been enumerated. Out of all the diseases described in *vartma gata roga*, *Praklinnavartma* is similar to Blepharitis starting from its derivation to treatment principles.

In *Ayurvedic* texts no separate *Nidanas* (causative factors) are mentioned for most of the disease including *Praklinnavartma*. Hence general causative factors are to be taken as causative factors for *Praklinnavartma* also. These *Nidanas* [4] are classified into *Aharaja* (dietary cause) as the *rasas* like *Amla* and *Katu* particularly harmful for eyes e.g. *Kulatta*, *Masha* etc. can result into formation of *Ama* & vitiation of *Doshas*; *Viharaja*(regimental) as hot water head bath, daytime sleeping, smoking, watching moving objects etc. as well as *Manasika* (psychological) and *Aaghataja* (traumatic).

Praklinnavartma (Blepharitis) has been described in our classics as independent disease. The major aspect of disease *Praklinnavartma* (Blepharitis) is *Aruja*, *Bahyatah Shumam*, *Antah Klinnam*, *Srava*, *Kandu* & *Nistoda*. It is *Kapha Pradhana* disease & Chronic in nature. Recurrence of the disease *Praklinnavartma* mainly occurs due to *Doshas*, which are situated in the body in latent state and when favorable condition (aggravating factors) occurs then disease again reappear. Blepharitis is a chronic inflammation of the lid margin. It is characterized by a variety of clinical manifestations which often includes alteration of ocular surface.

The present trial drug *Yoganjana* is a herbomineral composition containing 4 ingredients (*Kasisa*, *Samudraphena*, *Jatikali*, *Rasanjana* and *Madhu*). *Yoganjana* is a *Ropanajana* (a healing agent in ointment form) because it contains *Kashaya-tikta pradhana Rasa* [5]. *Rasanjana* is obtained from the stem and root of *Berberis aristata*. It contains alkaloid berberine which is antiseptic and bacteriocidal in action. The *Rasa* of *Rasanjana* is *Katu* & *Tikta* due to which it is having a property of *chakshuvirechana*, *abhishyandnashaka*, *kandukledanashaka*, *lekhana* & *vranavasadaka* [6]. So, it has been confirmed to have an anti inflammatory, anti bacterial and anti fungal properties. The rest of the drugs have *kashaya-tikta-madhura rasa* & due to which it is having a property of *sanshamana*, *shodhan*, *ropan* [7] etc.

There is no limitation in the age & majority of cases were in the age of 11-20 yrs. i.e. 40%. Comparatively female ratio (53.3%) is more this may be due to mode of work where females are regularly involving house work of cleaning without

protective precautions. It was observed that 93.3% of cases were Hindus because Hindus constitute the majority of the population in the country. Majority of the patients were from *Anupa* area i.e. 56.67%. This reflects the geographical location of this particular region. As mentioned in *Ayurvedic* literature that there is predominance of *Kapha* in *Anupa* area and occurrence of *Kapha pradhana* diseases are frequent [8], we may conclude that incidence of the *Praklinnavartma* is a very common ailment in this particular locality. High incidence of *madhura rasa satmya* i.e. 56.67% reflects the increased level of *kapha* in the body leading to the formation of this disease. The maximum i.e. 33.33% patients had *Vatta-Kapha* & *Pitta-Kapha Prakriti*, 20% patients had *Kapha Prakriti*. Though, *Praklinnavartma* occurs due to aggravation of *Kapha- Vatta Doshas* but mainly it involves *Kapha* as depicted in *Ayurvedic* texts. As this sample is very small, no definite correlation between *Sharira Prakriti* and occurrence of *Praklinnavartma* could be established. But it is clear from the above fact that this disease is common in *Kapha pradhana prakriti*.

The study highlights that maximum 80% of patients having dandruff on their scalp. It was observed that blepharitis (mainly seborrheic type) was seen in those patients who had already seborrhea. So it must be included in the causative factor of blepharitis (*Praklinnavartma*).

It was observed that 46.67% of patients were suffering from mild pain, 81.67% patients from lid edema, 90% patients from palpebral congestion, 41.67% patients with bulbar congestion, 50% patients had discharge, 90% patients had itching in eyes, 95% patients had scaling on the lid margin, remaining 25% patients had ulcerated lid margin. It shows that among 8 features involvement of scaling on lid margin, itching and palpebral congestion are the most common feature in majority of the patients.

The effect of drug is evaluated on different signs & symptoms of blepharitis. The observation were made on 7th day & 15th day and finally at 30th day. The drug therapy was stopped on 15th day and effect of drug withdrawal was also seen in the patients. The results have been presented after applying student's t-test.

The mean grade of pain before treatment was 1.18 and after treatment it became 0.95. The reduction being 0.22 (t=2.48) is significant statistically. This effect may be due to anti-inflammatory & wound healing property of this drug. The mean grade of Lid edema before treatment was 1.77 and after treatment it became 1.56. The reduction being 0.20 (t=2.93) is significant statistically. This effect may be due to anti-inflammatory property of this drug. The mean grade of congestion in palpebral conjunctiva before treatment was 1.54 and after treatment it became 1.47. The reduction being 0.06 (t=1.77) is insignificant

statistically. The mean grade of scaling before treatment was 1.10 and after treatment it became 0.73. The reduction being 0.36 (t=3.24) is significant statistically. This effect is due to anti-inflammatory & astringent property of the drug. The poor response over palpebral congestion in comparison to bulbar congestion can be explained on the ground that palpebral conjunctiva (lid conjunctiva) is the site of origin of disease whereas the bulbar conjunctival congestion was its extension. When the bulbar conjunctival congestion has receded within 2 weeks duration it is expected that palpebral will certainly reduce by application of *Yoganjana* for longer duration. The mean grade of discharge before treatment was 1.30 and after treatment it became 1.11. The reduction being 0.19(t=2.43) is significant statistically. This effect is due to anti-inflammatory & anti-microbial property of the drug. The mean grade of itching before treatment was 1.89 and after treatment it became 0.56. The reduction being 1.33 (t=8.72) is highly significant statistically. The cause of itching is potent *kapha dosha* and *Yoganjana* has *kaphagna* property. The mean grade of scaling before treatment was 1.77 and after treatment it became 0.59. The reduction being 1.18 (t=11.40) is highly significant statistically. This effect is due to anti-inflammatory & anti-microbial property of the drug. The mean grade of ulceration before treatment was 1.38 and after treatment it became 0.84. The reduction being 0.53 (t=2.94) is significant statistically. This effect is due to anti-inflammatory & anti-microbial property of the drug.

CONCLUSION

The application of *Yoganjana* relieves the various signs & symptoms of *Praklinnavartma* e.g. itching, scaling, lid edema, bulbar congestion, discharge & ulceration within 2 weeks therefore we may conclude that the *Yoganjana* is most effective drug for the treatment of blepharitis (*Praklinnavartma*).

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