

**A CLINICAL STUDY TO EVALUATE THE EFFICACY OF
RASANJANADI ANJANA AND HARIDRA SEKA IN THE
TREATMENT OF THE PRAKLINNVARTMA (BLEPHARITIS)**

¹**Dr. Abhilasha**, ²**Dr. Aditi** and ³**Dr. Punita**

¹P.G. Scholar, Department of *Shalakya Tantra*, Uttarakhand Ayurved University, Gurukul
Campus, Haridwar.

²Assistant Professor, Department of *Shalakya Tantra*, Uttarakhand Ayurved University,
Gurukul Campus, Haridwar.

³P.G.Scholar, Department of Sharir Kriya, National Institute of Ayurveda, Jaipur.

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***Corresponding Author**

Dr. Abhilasha

P.G. Scholar, Department of
Shalakya Tantra,
Uttarakhand Ayurved
University, Gurukul
Campus, Haridwar.

ABSTRACT

Praklinnvartma is one of the disease of the *Vartma*(eyelids). On the basis of the etiology, clinical features and etiopathogenesis it has been correlated with the Anterior Blepharitis. Anterior Blepharitis is the chronic bacterial infection of the anterior part of the eyelid margin. It may undergo the spontaneous resolution but never cure or may progress into further complications which can result into the vision loss as well. This study was carried out to see the effect of *Rasanjandi Anjana* in the one group having 20 patients. In the other group having 20 patients the *Haridra Seka* followed by the *Rasanjanadi Anjana* was given. The overall effect of the therapy was that in both the groups none of the patients has come up with the no relief(unchanged), mild relief(1% – 25%), moderate relief(26% - 50%). In group A patient

having the significant relief(51% - 75%) were 61.11% and the patients having the excellent relief(76% - 100%) were 38.89%. The group B only comprises of the patient having the excellent relief(76% - 100%) i.e 100% relief.

KEYWORDS: *Praklinnvartma*, *Rasanjandi Anjana*, *Vartma*(eyelids).

INTRODUCTION

Praklinnavartma is one of the *Vartma roga*.^[1] Acharya Sushruta described the *Praklinnavartma* years ago but to correlate and understand the etiology, clinical features and treatment of the *Praklinnavartma* in the present era becomes more interesting.

In the present era on the basis of the signs, symptoms, etiology and the pathogenesis *Praklinnavartma* is being correlated with the Anterior Blepharitis which is a sub acute or the chronic bacterial eyelid disease.^[2] It is a common cause of the ocular discomfort and irritation.^[3] In India^[4] a study on 756 patients was taken into consideration in the period from January 2005 to December 2005 regarding the bacterial ocular infections, of which 462(61%) eyes had the adnexal bacterial infection and rest has other ocular infections such as cornea, sclera and the other intraocular structures. The number of patients visiting per day in the Shalakya OPD in the Gurukul Campus, Haridwar having the clinical features of the *Praklinnavartma* is also good, which forced to select this topic. Its management is also a challenge for the modern medical science because of the poor correlation between the signs and symptoms, the uncertain etiology and the mechanism of the disease process.^[5] The antibiotics and steroids which are given to the patients also has the side effects such as irritation, itching, swelling, redness, allergic reactions, glaucoma, cataract, optic nerve damage etc.^[6]

Hence the limitation of the treatment along with the high cost of the modern drugs and the high prevalence of the disease has aroused the interest to carry out a study aimed at the finding the permanent cure for the Anterior Blepharitis with the help of Ayurveda.

AIMS AND OBJECTIVES

1. To study the conceptual resemblance between *Praklinnavartma* and the Anterior Blepharitis.
2. To evaluate the efficacy of *Rasanjanadi Anjana*^[7] in the management of the Anterior Blepharitis.
3. To evaluate the efficacy of *Haridra Seka* followed by *Rasanjanadi Anjana* in the management of Anterior Blepharitis.

CONCEPTUAL STUDY

Definition – *Praklinnavartma* is characterized by the *klinnata* means having the *kleda* i.e *adrata* (moisture) or the moistening of the eyelids. It is described by Acharya Sushruta,

Acharya Yoga Ratnakara^[8] as *Praklinnavatma*. Acharya Vagbhatta^[9] has considered it by *Kaphotklishta Vartma*.

Anterior Blepharitis is characterized by the inflammation of the hair follicles and the glands along the eyelid margins.

Nidana/Etiology – *Praklinnavartma* has no separate *nidana*, its *Aharaj*, *Viharaj*, *Manasika* and *Aghataj nidana* are common as for the other *netra rogas* as well. But as in particular if we consider for the *Praklinnavartma Shukta*, *Arnala*, *Kulattha*, *Masha sevana*, *Durekshanata*, *Dhooma sevana*, *Raja sevana*, *Sukshamanirikshana*, *Savapanvipraya*, *Ushanabhitaptasya jalaprveshat*, *Rodana*, *Kopa*, *shoka*, *Kleasha*, *Abhighata* are taken as the causative factors.^[10] All these *Nidana* are *Kaphavardhaka* and *Achakshushaya* which make the eye susceptible to the development of the *Praklinnavartma*.

Anterior Blepharitis has many causes but the *Staphylococcus* microorganism has been attributed as the main cause of the disease. The causes^[11] which makes the eyelid more susceptible to the attack of this microorganism are the more exposure of the person to the dust, smoke, refractive errors, poor lid hygiene, dry eye, more intake of the starchy food, infection from the surrounding sutures such as the teeth, tonsils, nose, sinuses etc. Constitutional factors such as the hereditary, metabolic disturbances such as the DM are also the cause.

Samprapti/Pathogenesis - *Praklinnavartma* is mainly *Kapha pradhana* disease. So the *kapha vardhaka* and the *Achakshushaya Ahara*, *Vihara* will led to the vitiation of the *Agni*, further causing the vitiation of the *Rasa* which leads to the *kaphavridhhi*. This increased *kapha* via the *Sira* and the *Srotas* and with the help of the *prana*, *udana* and the *vyana vayu* will get situated in the *vartma* of the *netra*. There due to the *dosha* and the *dushaya samoorkshana* will led to the *Rakta* and the *Mamsa dushti* and hence leding to the *kleda vridhhi* and then *Praklinnavartma*.

In the case of the Anterior Blepharitis after the attack of the *S. aureus*^[12] there occurs the suppuration which is confined to the hair follicle in the initial stage. In the second stage there occurs the extension of the inflammation outside the hair follicles into the surrounding connective tissue. In the third stage perifollicular abscess is formed resulting into the considerable destruction and the ulceration. Final stage is that of the healing by scarring involving the lid deformity and the destruction of the eyelashes.

In case of the seborrheic^[13] type of the Anterior Blepharitis in the early stage there occurs vascularisation associated with the epidermal scaling, tarsal zone becomes hyperaemic. As the time goes on the margins becomes thickened, posterior edges of the palpebral margin loses its shape. Therefore the detachment of lid with the globe allow the tears to accumulate, resulting in the epiphora.

Rupa /Clinical features – *Praklinnavartma* is characterized by the *Aruja*(no pain or the mild pain), *Bhaya shunam*(Lid oedema), *Antaha klinna*(palpebral congestion), *Srava*(watering), *Kandu*(itching), *Toda*(pricking sensation).^[14]

Anterior Blepharitis is characterized by itching, watering, heaviness over the lid margins, burning sensation, pricking sensation, hyperaemia of lid margins, palpebral congestion, gluing of cilia, falling of the eyelashes, crusting of the scales over the lid margins.

MATERIAL AND METHODS

A) Selection of patients

NO. OF PATIENTS- Total 40 patients presenting the clinical features of *Praklinnavartma* (Anterior Blepharitis) were selected from - O.P.D/I.P.D Of PG Dept. of *Shalakya Tantra*, Gurukul Campus, Haridwar, Uttarakhand Ayurved University, Dehradun.

GROUPS- Two Groups A and B.

INCLUSION CRITERIA

- The patients presenting with signs and symptoms of *Praklinnavartma* (Anterior Blepharitis) were included in the study irrespective of sex and religion.
- Patient between age group (17- 70 years).
- Patient ready to give written consent for study.

EXCLUSION CRITERIA

- Patient presenting with sequel of Anterior Blepharitis like corneal ulcer, entropion, ectropion, trichiasis, keratitis etc.
- Patients presenting Posterior blepharitis.
- Patient presenting with secondary inflammation and mechanical changes in cornea and conjunctiva.
- Patients suffering from specific eyelid disorders like tumour, carcinoma, lagophthalmous.

- Patients suffering from systemic diseases like diabetes, hypertension, bleeding disorders, skin disorders like psoriasis etc.
- Patient having Uncorrected refractive errors.

ASSESSMENT CRITERIA

1. *Kandu* (Itching)

0 = Absent

1 = A mild continuous itching(can be localised), not requiring eye rubbing.

2 = A definite itching, the subject would like to rub.

3 = An incapacitating itching which would require significant eye rubbing.

2. *Srava* (Discharge)

0 = Absent.

1 = Mild(eyes feel slightly watery, no need to wipe eyes).

2 = Moderate(occasionally need to wipe eyes).

3 = Severe(tears rolling down cheeks).

3. Heaviness in lids

0 = Absent

1 = Heaviness on lids only in the morning.

2 = Intermittent heaviness on lids.

3 = Continuous heaviness on lids.

4. Burning sensation

0 = Absent

1 =Only on exposure to sunlight.

2 = Intermittent burning sensation.

3 = Continuous burning sensation affecting routine work.

5. *Toda* (Pricking sensation)

0 = Absent

1 =Only on exposure to sunlight.

2 = Intermittent pricking sensation.

3 = Continuous pricking sensation affecting routine work.

6. Bahyatama Shunam (Lid oedema)

0 = No Lid Edema

1 = Mild (Oedema present but Palpebral fissure not narrowed)

2 = Moderate (Oedema present with slight narrowing of Palpebral fissure $<3/4$)

3 = Severe (Oedema present with significant narrowing of Palpebral fissure $>3/4$)

7. Antaha Klinna (Palpebral congestion)

0 = None

1 = Mild (Superficial congestion present)

2 = Moderate (Mucopurulent discharge present)

3 = Severe (Conjunctival reaction such as follicle or papillae present)

8. Bulbar Congestion

0 = (None) No Congestion

1 = (Mild) Only in periphery and visible on moving eyeball up and down.

2 = (Moderate) Congestion present at Palpebral aperture and visible without moving eyeball.

3 = (Severe) Discharge present in whole Bulbar area

9. Hyperaemia of anterior lid margin

0 = (None) Normal age related lid discoloration.

1 = (Mild) Pink capillary involvement along the lid edge, no patches of confluent capillary redness throughout the lid edge.

2 = (Moderate) Deep pink or red confluent capillary redness present locally along the lid edge.

3 = (Severe) Deep red diffuse confluent capillary redness present along the lid edge.

10. Gluing Of Cilia

0 = gluing of cilia not present

1 = gluing of cilia present in one quadrant of lid margin

2 = gluing of cilia present in two quadrant of lid margin

3 = gluing of cilia present in three or more quadrant of lid margin

11. Falling of Eye lashes

0 = No eye lashes fallen

1 = Mild (1-5 eyelashes fallen)

2 = Moderate(6-10 eyelashes fallen)

3 = Severe(>10 eyelashes fallen)

12. Scales over eyelid margins

0 = No scales present

1 = Mild(1-5 scales present)

2 = Moderate(6 – 10 scales present)

3 = Severe (>10 scales present)

Investigations

1) Hb%,

2) T.L.C,

3) D.L.C,

4) E.S.R,

5) C.B.C

6) R.B.S

❖ The study type was Randomized comparative clinical trial.

Method of Treatment/Intervention

❖ Before starting the trial patients were given *Avipattikara churana* (5gm) and *Chitrakaadi Vati* (2 BD) for the *Nitya Virechana (Shodana)* 5days as said by the *Acharya Sushruta*.

A. Selected drug

a. *Rasanjanadi Anjana* (in Ointment form) and

b. *Haridra seka*.

Anjana – it was given topically in the dose of the 1 *Harenu*(20 mg) using the finger tip over the anterior part of the lid margin, twice a day(i.e morning and the evening).

Seka – It was given 200 matra (7.50 mint.), at the morning time. It was given in three sittings of the five days with the three days gap in the 1st and the 2nd sitting.

Assessment & follow Up - Patient were given three sittings of 5 days with three days gap after 1st and 2nd sitting.

Observations was done on 1st, 7th, 14th & 21st day and patientst were again called up for follow up for the next 21 days after the completion of the trial.

EFFECT OF THERAPY IN GROUP A

S.NO.	VARIABLE	N	BT Mean	AT Mean	Difference	% Relief	SD	SE	P	Significance
1.	<i>Kandu</i>	18	2.777	0.000	2.777	100%	0.5483	0.1292	<0.0001	HS
2.	<i>Sarava</i>	14	2.500	1.357	1.143	42.85%	0.3755	0.1042	0.0002	HS
3.	Heaviness	18	1.888	0.500	1.389	67.64%	0.5123	0.1281	<0.0001	HS
4.	Burning sensation	16	2.0625	0.9375	1.125	48.48%	0.3631	0.09705	0.0001	HS
5.	<i>Toda</i>	14	2.357	1.071	1.286	54.54%	0.4688	0.1253	0.0001	HS
6.	Lid oedema	11	2.181	0.5454	1.6356	75%	0.5045	0.1521	0.0010	HS
7.	<i>Antaha Klinna</i>	12	2.416	0.666	1.75	72.41%	0.4523	0.1306	0.0005	HS
8.	Bulbar congestion	6	2.333	1.166	1.167	50%	0.4082	1.667	0.0313	S
9.	Hyperaemia of Anterior lid margin	16	1.750	0.375	1.375	78.57%	0.5000	0.1250	<0.0001	HS
10.	Gluing of cilia	7	3.142	0.714	2.428	68.00%	0.7868	0.2974	0.0156	S
11.	Falling of eyelashes	11	2.000	0.2727	1.7273	86.36%	0.6467	0.1950	0.0010	HS
12.	Crusting of the scales	18	2.888	0.333	2.555	88.46%	0.6157	0.1451	<0.0001	HS

EFFECT OF THERAPY IN GROUP B.

S.NO.	VARIABLE	N	BT Mean	AT Mean	Difference	% Of Change	SD	SE	P	SIGNIFICANCE
1.	<i>Kandu</i>	18	2.777	0.000	2.777	100%	0.4278	0.1008	<0.0001	HS
2.	<i>Sarava</i>	18	2.111	0.277	1.834	86.84%	0.7859	0.1852	<0.0001	HS
3.	Heaviness	18	2.444	0.000	2.444	100%	0.7838	0.1847	<0.0001	HS
4.	Burning senasation	18	2.333	0.111	2.222	95.23%	0.7321	0.1726	<0.0001	HS
5.	<i>Toda</i>	18	2.777	0.388	2.389	86%	0.5016	0.1182	<0.0001	HS
6.	Lid oedema	8	2.500	0.000	2.500	100%	0.5345	0.1890	0.0078	VS
7.	<i>Antaha klinna</i>	11	1.555	0.000	1.555	100%	0.5222	0.1575	0.0010	HS
8.	Bulbar congestion	8	0.888	0.111	0.777	87.50%	0.7071	0.2500	0.0078	VS
9.	Hyperaemia of Anterior lid margin	16	1.444	0.000	1.444	100%	0.5000	0.1250	<0.0001	HS
10.	Gluing of cilia	14	1.666	0.000	1.666	100%	0.7703	0.2059	0.0001	HS
11.	Falling of Eyelashes	13	1.277	0.000	1.277	100%	0.5991	0.1662	0.0002	HS
12.	Crusting of the scales	18	2.888	0.000	2.888	100%	0.3234	0.07622	<0.0001	HS

INTER GROUP COMPARISON OF GROUP A AND GROUP B

S.NO.	Variable	Group	AT Mean	SD	SE	P	Significance
1.	<i>Kandu</i>	A	0.000	0.5483	0.1292	0.7649	NOT SIGNIFICANT
		B	0.000	0.4278	0.1008		
2.	Sarava	A	1.357	0.3631	0.09705	0.0067	VERY SIGNIFICANT
		B	0.277	0.7859	0.1852		
3.	Heaviness	A	0.500	0.5016	0.1182	0.0002	VERY SIGNIFICANT
		B	0.000	0.7838	0.1847		
4.	Burning sensation	A	0.9375	0.3416	0.08539	<0.0001	HIGHLY SIGNIFICANT
		B	0.111	0.7321	0.1726		
5.	<i>Toda</i>	A	1.071	0.4688	0.1253	<0.0001	HIGHLY SIGNIFICANT
		B	0.388	0.5016	0.1182		
6.	Lid oedema	A	0.5454	0.5045	0.1521	0.0061	VERY SIGNIFICANT
		B	0.000	0.5345	0.1890		
7.	<i>Antaha klinna</i>	A	0.666	0.4523	0.1306	0.0023	VERY SIGNIFICANT
		B	0.000	0.5222	0.1575		
8.	Bulbar congestion	A	1.166	0.4082	0.1667	0.1060	NOT SIGNIFICANT
		B	0.111	0.7071	0.2500		
9.	Hyperaemia of Anterior Lid margin	A	0.375	0.5000	0.1250	0.1707	NOT SIGNIFICANT
		B	0.000	0.5000	0.1250		
10.	Gluing of cilia	A	0.714	0.7868	0.2974	0.4214	NOT SIGNIFICANT
		B	0.000	0.7703	0.2059		
11.	Falling of eyelashes	A	0.2727	0.6467	0.1950	0.8685	NOT SIGNIFICANT
		B	0.000	0.5991	0.1662		
12.	Crusting of the scales	A	0.333	0.6157	0.1451	0.0561	NOT SIGNIFICANT
		B	0.000	0.3234	0.07622		

OVERALL EFFECT OF THERAPY

EFFECTS	GROUP A		GROUP B	
	No. Of Patients	Percentage	No. Of Patients	Percentage
No Relief(Un Changed)	00	00	00	00
Mild Relief (0 % - 25%)	00	00	00	00
Moderate Relief (25% - 50%)	00	00	00	00
Significant Relief (50% - 75%)	11	61.11%	00	00
Excellent Relief (75% - 100%)	7	38.89%	18	100%

FOLLOW UP

In group A no complaint was observed in during the first follow up after treatment, during the second follow up *Kandu* was the major complaint which was observed in 6 patient out of

18 i.e the proportion was 33.33, second major complaint was the palpebral congestion observed in 5 patients out of 18 hence the percentage is 27.77%, least complaint was of the *sarava* which was made by 3 patients hence the proportion is 16.66%.

During the third follow up the proportion of people suffering from *kandu* rises to 50.00% while that of the *sarava* was 5 patients (22.22%) and the proportion of the people having the palpebral congestion was 8 patients i.e 44.44%.

In group B no complaint observed in the 1st and the second follow up, but in the third follow up the complaint of the *kandu* was made by the 7 patients i.e 38.88%.

DISCUSSION ON THE DRUG UNDER THE TRIAL

Ingredients for the *Seka* and the *Anjana*

Anjana – It includes *Rasanjana*, *Sarjarasa*, *Jati pushpa*, *Kali maricha*, *Gairik*, *Manashila*, *Samudraphena*, *Saindhava lavana*, *Madhu*.

Seka – For the *Seka Haridra* is being chosen.

The ingredients chosen are *kaphanashaka*, *Khapittanashaka*, *shothara* (anti inflammatory), *vedanasthapana* (analgesic), *prasadankra* (soothing), *lekhanakara*, antioxidant, *Tridoshara*, *Rakta shodaka* antibacterial, *kandughana*, *vraha – shodana*, *varna – ropana*, *chakshushya*. As per claimed in the *Bhaisajya Ratnavali* (158 – 159) the present *Anjana* will enhance the growth of the eyelashes and also help in removing the *Kleda* and *Kandu*. The fall of the eye lashes has been also been commonly seen in the patient of the Anterior blepharitis. In fact all of these ingredients will combinedly work upon the case of the Anterior blepharitis where itching, lacrimation, pricking sensation, watering hyperaemia, crusting of the scales, falling of the eye lashes etc. has been the common complaint.

Mode of action of the *Anjana* in the *Praklinnavartma*

When the *Anjana* was applied on the eyelids it has worked in the following ways.

1. It has high bioavailability due to the thick consistency given by its ingredients such as honey, so that it remains in contact to the eyelids cells for the long time and hence giving it the maximum efficacy.
2. It has high potency and the penetration power because it is a combination of the herbo – mineral drug which made it *Yogvahi* as it is the property of the *Rasaushadi*.

3. Most of the ingredients of the *Anjana* has the *Tikta*, *Kashaya*, *Madhura* and *katu rasa*. Due to the *Tikta*, *katu* and the *kashaya rasa* the *kapha– pitta dosha*, got alleviated and it also did the *lekhana karma*.
4. The *Madhura rasa* provided the soothingness to the eyelids which have been scrapped due to the crusting of the scales, and also helped in relieving the palpebral congestion, itching, pricking and the burning sensation.
5. The *Guru* and the *Snigadha guna* of the ingredients worked upon the *Vata* and the *Pitta dosha*, and hence decreased the hyperaemia present over the eyelid margins and also the burning sensation.
6. The *laghu* and *ruksha guna* acted upon the *kapha dosha* and hence eliminated the lid oedema, watering and gluing of cilia.
7. With the help of the *Tikshana guna* its penetration power got enhanced into the eyelids and after entering thereby into the blood vessels which purified the blood and hence thereby creating a new way for the growth of the cilia and hence the eyelashes.
8. Since the ingredients are *Chakshushaya*, *Tridoshara*, *krimighana*, hence destroyed the bacteria further decreasing the rest of the problems such as watering etc. from the *Praklinnavartma*.

Seka – The *Seka* was freshly prepared for the patient when he/she visited in the OPD.

Kwatha(decoction) preparation – 1 part *Haridra* + 4 part water – $\frac{1}{4}$ is reduced till $\frac{3}{4}$ get remained.

The *Haridra* choosen for the *seka* is *lekhanakara*, *shothara*(anti-inflammatory), *vedanasthapanakara*(pain reliever), *Tridoshara*, *Kantikara*(hence remove the discoloration caused over the lid margins) as described in the *Bhavapraksha Nighantu* and hence it also fits in the treatment of the *Praklinnavartma*(Anterior Blepharitis).

Mode of action of seka

The effectiveness and the working efficacy of *Seka* lies in its three properties i.e height, its flow (*Sara guna*) and its temperature(*Ushna guna*).

1. The *Kwatha* taken when allowed to fall from a height of 4 *Angulas* produced a mechanical effect on the desired area(medial canthus) and became instrumental in stimulating the nerve impulses, increasing the circulation and hence increasing the fresh blood flow there.

2. The *Sara guna* i.e the continuous flow of the *Kwatha* made the vitiated *doshas* to move away from the affected site.
3. The *Ushna guna* regulated the *Dhatvagni Mandhaya* and by increasing the temperature at the desired site it converted the *Amaavastha* of the *Netra Roga* into the *Niramavastha*. It also increased both the Anabolic and the Catabolic reactions there and hence removed the dead cells and debris and hence created a new path for the formation of the new tissues.

DISCUSSION ON GENERAL OBSERVATIONS MADE IN THE TRIAL.

General observation made in the trial

- ❖ These observations has been made during the time of the COVID19 PANDEMIC.

Total 40 patients were registered with 20 patients in each group out of which 36 patients completed their trial and two patients in each group has left the trial against any information. Hence 90% of the people completed their trial while only 10% left treatment against any information.

Age - Out of the 40 patients registered 45% lies within the age group of 17 – 30 years, 35% lies in the age group between 31 – 50 years and 20% lies in the age group 51 – 70 years. In literature it has been said that the disease get begins in the early childhood but the inclusion criteria is from 17 – 70 because the ingredients of the drug selected such as *Haridra*, *Rasanjana*, *kali maricha* are *Ushna Virya*, hence might produce irritation and the burning sensation which becomes intolerable for the childrens.

Sex - In this particular area where the trial has been conducted the ratio of the proportion of the sex affected is equal. But in literature it has been said that in the case of the Blepharitis females are more affected, here in this trial conducted it may be concluded that the female patients came less out from home due to the fear of the pandemic.

Religion - The proportion of the Hindu affected was 85% and the Muslim community accounted for only the 15%. This may be due to the Hindu religion dominated area.

Occupation - In observation it is being concluded that the ratio of the student and the Housewives affected is equal i.e. 30% followed by the servicemen and after that followed by the businessmen.

It proves that students are less cared about their lid hygiene and also has more exposure to T.V and cell phones and are also more found of the intakers of the starchy food which makes them obese and their immunity also get compromised.

Housewives has regular exposure of dust, fumes in the kitchen.

Servicemen on the other hand has exposure to the electronic gadgets along with the dust, smoke as well due to their daily visit from outside home.

Businessmen are the least affected in this study it may be that they handle mostly their business on the phone calls during this pandemic time.

Education - Among the 40 patients selected maximum affected were those of having the education upto the secondary level(35%), followed by the uneducated (22.50%), after that the graduates(25%), then middle class(10%) and the least affected were the postgraduates(7.50%). This may be due to the lack of the unawareness regarding the importance of the maintenance of the lid hygiene in the less educated and the uneducated population.

Habitat - Maximum people affected belonged to the rural area (62.50%) than the urban population (37.50%). This is also due to the unawareness and lack of the proper education regarding the lid hygiene in the rural areas.

Socio economic - This study shows that maximum people affected in this trial belonged to the middle class(75%), followed by the poor society people (22.50%), and the least affected were the rich people(2.50%). In the middle class it may be due to the more use of the cosmetics which leads to the allergy and this class is mostly working class as well and hence more stress etc. In poor people it may be due to the lack of the proper nutrition and lack of the proper education about the lid hygiene.

Marital status - Maximum affected are the married people. It may be due to the busy life style after getting married and less time for the care of the hygiene.

Dietary - The maximum affected from the Anterior Blepharitis were vegetarian(57.50%) than the mix diet (42.50%). The dietary habit of a patient is dependent on their choice and religious customs. This is because this area may be vegetarian dominant and the food taken is rich in the carbohydrates which is also one of the reason for the development of the Anterior Blepharitis.

Appetite - The 72.50% of the patients selected for the trial are having the good appetite and those having the poor diet are 20% and those having the average are only 7.50%. Hence this data does not shows the effect of the appetite or *Ahara shakti* as the cause of the *Praklinnavartma*(Anterior Blepharitis). Inspite it is being said that *Praklinnavartma* is a *kaphaj roga* and due to the *kapha* the patient suffers from the *Agnimandhaya*, but this trial does not verify this point.

Bowel habit - The patient recruited for the treatment of the *Praklinnavartma*(Anterior Blepharitis) were having the maximum proportion of the regular bowel habit(65%) than that of irregular (35%). Hence this proves of the no significant effect of the bowel movement on the *Parklinnavartma* on the patients selected in this particular area.

Urinary habit - No significant effect of the micturition as the cause of the *Praklinnavartma* was there, as the patients with the normal micturition are 80% while those of the burning micturition were only 20%.

Sleep - No effect of the sleep as the cause of the *Praklinnavartma* was seen, as the proportion of the patient having the sound sleep is 60% and that of the disturbed sleep is 40%.

Addiction - No addiction people are the maximum sufferers and that accounts 47.50%, followed by the tea adductors afterwards 25%, then the smokers 17.50%, and that of the alcohol are 7.50% and the tobacco chewers are the least in this trial 2.50%. This may be due to the fear of the pandemic people avoided it.

Chronicity - This data of the chronicity claims about the subacute condition of the Anterior Blepharitis in this particular area of the patient selected for the trial. As the maximum no. of the patients have chronicity in the range of the 0 to 3 months. The trial verifies this point. It may be that patients generally remains unaware about the *Praklinnavartama*(Anterior Blepharitis) and hence are not able to give their true history.

Prakriti - This data shows that the maximum sufferers belong to that of the *Vata kapha*(50%), *Pitta kapha*(35%) and that of the *Vata pitta* are least (15%). This trial also verifies that the *Praklinnavartma* is a *Kaphaj* disease.

Since the sample size choosen for the trial is small so due to its small size each criteria does not fit into all the cause of the *Praklinnavartma*(Anterior Blepharitis) as described in the

literature. Following points are seen as the main cause of the *Praklinnavartma* in this trial conducted.

- ❖ It mainly signifies about the unawareness towards the lid hygiene as the main cause of the disease which makes the people more expose to the attack of the microorganisms, since the Anterior Blepharitis main cause is also the *Staphylococcus* bacteria.
- ❖ After unawareness nutritional status is also the main cause i.e. lack of the proper nutrition or more intake of the starchy food which further lowers the immunity putting people at the risk of the *Praklinnavartma* (Anterior Blepharitis).
- ❖ Since the Haridwar is a big attraction for the pilgrims and due to the river Ganga it is also a coastal area so the people visiting from the other place per day is also very large hence making the local people more exposed to the dust, smoke, allergy etc.
- ❖ Ignorance towards the Anterior Blepharitis is also the cause for making the problem more severe as in starting the disease is not more problematic.

In the group A the effect of *Rasanjanadi Anjana* is Highly significant in *Kandu*, *Sarava*, Heaviness, Burning sensation, *Toda*, lid oedema, *Antaha Klinna*, Hyperaemia of Anterior lid margin, Falling of eyelashes, scaling of eyelashes. But the effect remains Significant only in the case of the Bulbar congestion and in the gluing of cilia.

The effect of *Seka* and *Rasanjanadi Anjana* in group B is Highly significant in the treatment of the *Kandu*, *Sarava*, heaviness, burning sensation, *Toda*, *Antaha klinna*, Hyperaemia of Anterior lid margin, falling of eyelashes, crusting of the scales and in the gluing of cilia, but it is very significant in the treatment of the Lid oedema and in Bulbar congestion.

In the intercomparison of the group A and group B the result was Not significant in the case of *Kandu*, Bulbar congestion, Hyperaemia of anterior lid margin, Falling of eyelashes, Scaling of eyelashes and Gluing of cilia. The result was Very significant in *Sarava*, Heaviness, Lid oedema, *Antaha klinna*. In the case of Burning sensation, *Toda* the result was Highly Significant.

The overall effect of the therapy was that in both the groups none of the patients has come up with the no relief (unchanged), mild relief (1% – 25%), moderate relief (26% - 50%). In group A patient having the significant relief (51% - 75%) were 61.11% and the patients having the excellent relief (76% - 100%) were 38.89%. The group B only comprises of the patient having the excellent relief (76% - 100%) i.e 100% relief.

During the follow up time in Group A mainly patients complaint of *Kandu*, palpebral congestion and *sarava* while in group B patients only complaint of *Kandu*.

CONCLUSION

Hence, the final conclusion of this trial is that the Group B where *Seka* followed by *Anjana* has shown the better results than the Group A where only *Anjana* was done.

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