

**STUDY OF THE EFFICACY OF GHRIT BHARJIT LODHRA
BIDALAKA IN KAPHAJAABHISHYANDA WITH SPECIAL
REFERENCE TO SPRING CATARRH****Dr. Darunde Sandeep Walmik^{1*} and Dr. Pravin Chavan²**

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ABSTRACT

In the present era of 21st century, due to busy life style and pollution of air, water etc leads to many of the eye diseases .Patients does not have time to think and act for the healthy life and not able to follow the proper instructions for care of the eye, which may be responsible for the recurrent and relapsing nature of the disease Simple Allergic conjunctivitis. Abhishyanda is considered as root cause of all eye diseases. If it is not treated in time it leads to severe complications like Adhimantha and Hatadhimantha. To avoid such complications Acharya Sushruta has stressed on the importance of immediate need of treatment in this disease. The drugs present in modern medicine are very costly and not safe to all the patients. Spring catarrh is one of such condition in which all the patients do not respond equally to available anti allergic drugs. None of the anti allergidrugs available in the

market can cure the conjunctivitis completely and steroids cause many of the side effects. This study aims the efficacy of ghrith bharjit lodhra bidalaka in kaphaja abhishyanda with special reference to spring catarrh. Statistical analysis and clinical study concluded that Ghrith Bharjit lodhra Bidalaka is an effective remedy for the management of Kaphaja Abhishyanda.

KEYWORDS: Kaphaja abhishyanda, lodhra, Goghritha, Bidalaka, Springcatarrh.

INTRODUCTION

Ayurvedic approach towards the disease is holistic. Numerous therapeutic modalities have been advocated by our Acharyas in the management of each and every diseases of eye. But their efficacy needs re-establishment by means of thorough and intensive research.

In the present era of 21st century, due to busy life style and pollution of air, water etc leads to many of the eye diseases. Patients do not have time to think and act for the healthy life and not able to follow the proper instructions for care of the eye, which may be responsible for the recurrent and relapsing nature of the disease Simple Allergic conjunctivitis.

Acharya Sushruta described Abhishyanda in Sarvagata Vyadhi, affecting all parts of the eye. It is of four types –Vataja abhishyanda, Pittaja abhishyanda, Kaphaja abhishyanda, Raktaja abhishyanda.

Abhishyanda is considered as root cause of all eye diseases. If it is not treated in time it leads to severe complications like Adhimantha and Hatadhimantha. To avoid such complications Acharya Sushruta has stressed on the importance of immediate need of treatment in this disease.

Abhishyanda is one of the aupsargic roga means contagious in nature. It can spread from person to person by sharing the articles like cloths, cosmetics items and close contact with infected person. It is also caused due to seasonal allergens like grass, pollens, weeds, animal dandruff and pollution is the main cause.

In the modern ophthalmology it stays compatible with Simple Allergic Conjunctivitis.

Conjunctivitis is an inflammation of the conjunctiva characterized by cellular infiltration and exudation.

The drugs present in modern medicine are very costly and not safe to all the patients. Spring catarrh is one of such condition in which all the patients do not respond equally to available anti allergic drugs. None of the anti allergic drugs available in the market can cure the conjunctivitis completely and steroids cause many of the side effects.

Chakshushya dravyas are those drugs which are beneficial to the eyes and eyes disorders. Lodhra and goghrita is one of the useful chakshushya dravya. Lodhra having

kaphapittashamak and Goghrita having Vatapittashamak property which is usefull in eye diseases.

AIM

“Study of the efficacy of ghrith bharjit lodhra bidalaka in kaphaja abhishyanda with special reference to spring catarrh”

OBJECTIVES

- 1) To assess the efficacy of ghrith bharjit lodhra bidalak in KaphajaAbhhishyanda.
- 2) To To study the action of Ghrith Bharjit Lodhra Bidalaka asnetraupkrama.
- 3) To observe the adverse effect if any.

MATERIAL AND METHODS

This study is selected on the basis of conceptual and clinical study. For clinical study 60 patients were selected. Lodhra and Goghrita has selected on its properties, easy availability and cost effectiveness.

MATERIALS AND METHODS

Materials

- 1) Lodhra churna and Ghrita for Bidalaka were taken from G.M.P. approved company.
- 2) Metal pan – for frying (bharjan karma) lodhra churna and ghrita.
- 3) Gas stove – for frying the lodhra churna and ghrita as well as for warming the water for hot fomentation.
- 4) Metal pot – for keeping the warm water.
- 5) Petry dish – for keeping churna, ghrita and ghrita bharjita lodhra churna paste.
- 6) Guaze piece – for cleaning the eyes and for hot fomentation.
- 7) Table – for keeping the patient relax and maintain the supine position.





Selection of Patients

The patients of Abishyanda attending the O.P.D and I.P.D of Shalakya tantra, of LRP Ayurvedic Medical college and research center, Islampur, Sangli, Maharashtra, India, were selected for this study irrespective of their sex, caste and socio economical status. The patients were examined in detail as per special proforma which includes both Ayurvedic and modern methods of examining the patients prepared for this purpose. They were further subjected to following criteria of inclusion and exclusion and investigations for the final diagnosis.

Study Design

The type of study was randomized, open, control study. Duration of study was of 15 days. A written consent of the patients was taken before taking them for study.

Inclusion Criteria

1. Patients showing the classical sign and symptoms of Kaphaja Netra Abhishyanda were selected for the study.
2. Patients of age group above 5 years and below 20 yrs. were selected for the study.
3. Patients irrespective of sex, occupation and socio-economic status were selected.

Exclusion Criteria

1. Patients of age group below 5 years and above 20 yrs. were excluded from the study.
2. Patients with other ocular disease.
3. Recently eye operated patients.
4. Patients with other major systemic diseases.

5. Systemic disorder excluded.

Subjective parameters

1. Netra Kandu (Itching)
2. Netra lalima (Redness of eye)

Objective Parameters

1. Netra Shotha (edema of eye lids)
2. Netra Srava (discharge)

Parameters for assessment Grading and scoring

A) Symptoms

- 1) Netra Kandu
 - 0 – Absent (No itching at all.)
 - 1 – Mild (Occasional)
 - 2 – Moderate (Persistent do not disturb routine work)
 - 3 – Severe (Routine work disturbance)
- 2) Netra Lalima
 - 0 – Absent (No congestion)
 - 1 – Mild (Congestion with clear pattern of blood vessel)
 - 2 – Moderate (Congestion with poorly visible pattern Vessel)
 - 3 – Severe (Velvety conjunctiva or loss of blood vessel pattern)

B) Signs

- 1) Netra Srava

0 – Absent	(No Discharge)
1 – Mild	(Occasional discharge)
2 – Moderate	(Persistent discharge)
3 – Severe	(Continuous discharge)
- 2) Netra Shotha
 - 0 – Absent (No edema)
 - 1 – Mild (Upper tarsal conjunctiva of both eye involved with lesion is characterized by presence of hard, flat topped papillae and mild congestion of bulbar conjunctiva.)
 - 2 – Moderate (Upper tarsal conjunctiva of both eyes shows large no. of hard, flat topped

papillae and congestion of bulbar conjunctiva.)

- 3 - Severe (In tarsal conjunctiva papillae becomes hypertrophied (cauliflower like appearance of giant papillae) and In bulbar conjunctiva, discharge red, conjunctiva along with thickened tissue above limbus and presence of whitish dots along with limbus.)

Groups of Patients

Total 72 patients were registered for the study, out of which 5 patients were eliminated as they did not fulfill the inclusion criteria; and 7 patients left the treatment in between the study.

Total 60 numbers of patients were selected for study, and randomly divided into two groups.

Group A

In this group 30 patients were treated with Ghrita Bharjit lodhra Bidalaka ; once in a day, in morning.

Group B

In this group 30 patients were treated with olopatadine (0.1%) Eye drop. One drop two times in a day.

Follow up of the patients

Follow up of the patient was done on 3rd, 6th, 9th, 12th and 15th day.

After completion of the treatment, the patient was asked for the follow up. In case of any recurrence of the symptoms, the patients was advised to visit even before the scheduled follow up.

Methods

Preparation of ghrita bharjita lodhra bidalaka

Lodhra - 1 Part

Ghrit - As required amount of ghrita was taken to fried (bharjan karma) the churna.

Water - As required amount of water will be taken sufficient to soak the churna First Lodhra churna 1 part and Ghrita were taken as per requirement and fried for 1 minute. 10 grams of this prepared drug for two eyes was taken for one time. As per requirement of tap water was added in it and made its paste in bowl.

Purvakarma

To avoid the anxiety the procedure was explained to them.

Bidalaka was performed in a place having sufficient light and devoid of direct blowing winds and dust. Patient was asked to lie comfortably in supine position on a table and eye is cleaned using sterile cotton swab. To avoid the anxiety the procedure was explained to them.

Pradhanakarma

After completion of Purvakarma, the patient was asked to relax and maintain the supine position on the table. The eye of the patient was asked to close and Ghrita bharjita lodhra bidalaka is applied on both eyelids. The Bidalaka was taken on index finger of hand & applied on eyelids except eyelashes upto 0.5 cm (0.48cm) thickness. The lepa was kept on eyelids upto semidry conditions.

Dosage

10 gm. Ghrita bharjita lodhra bidalaka of for both eyes. Bidalaka was given once in a day for 15 days.

The dose was same for all groups in affected eye only. If both eyes were affected of the same patient then the lepa was applied for both eyes.

Pashchatkarma

After performing the Bidalaka, the dried paste over the eyes were cleaned with sterile cotton cloth. Mild fomentation is given to eyes with cotton piece dipped in warm water. After this procedure, patient was asked to open eyes slowly. The patient was advised to avoid to expose wind, sun, dust, not to look minute or bright objects and to follow hygienic measures.



Matra of bidalaka

Matra: - $\frac{1}{4}$ th anguli, approximately 0.5cm = (0.48cm) Time of lepa:-

It will be applied in the morning hours and removed before it becomes shushka (Semidry).

Follow Up

Follow up will be taken on 3rd, 6th, 9th, 12th and 15th day.

After completion of the treatment, the patient was asked for the follow up. In case of any recurrence of the symptoms, the patients was advised to visit even before the scheduled follow up.

Application of olopaadine (0.1%) eye drop was taken for the treatment.

Patient was asked to lie in supine position in a room devoid of direct sunlight, dust. Hands were cleaned and eyes of the patient were cleaned with cotton swab. Vial containing eye drop was opened without touching tip of the nozzle. 1 drop is poured in each eye and this procedure was asked to repeat 2 times in a day, For 15 days.

Follow Up

Follow up will be taken on 3rd, 6th, 9th, 12th and 15th day.

After completion of the treatment, the patient was asked for the follow up. In case of any recurrence of the symptoms, the patients was advised to visit even before the scheduled follow up.

Observation

Following observation were done respective of age, sex, religion, economical status, family history of allergy with kaphaja abhishyanda. and also on the basis of change in the symptoms of patients.

Following observation were done according to.

Group A – 30 patient treated with Ghrita Bharjita Lodhra Bidalaka (Trialgroup).

Group B – 30 patient treated with olopatadine(0.1%) eye drop (Controlgroup)

Netrkandu	Day-0		Day-15		% Relief	Wilcoxon Signed Ranks Test Z	P
	Mean score	Sd	Mean score	Sd			
Group-A	1.33	.994	.60	.675	55.0	3.458	0.001 Sig
Group-B	1.57	.728	.73	.521	53.2	4.017	<0.001 HS

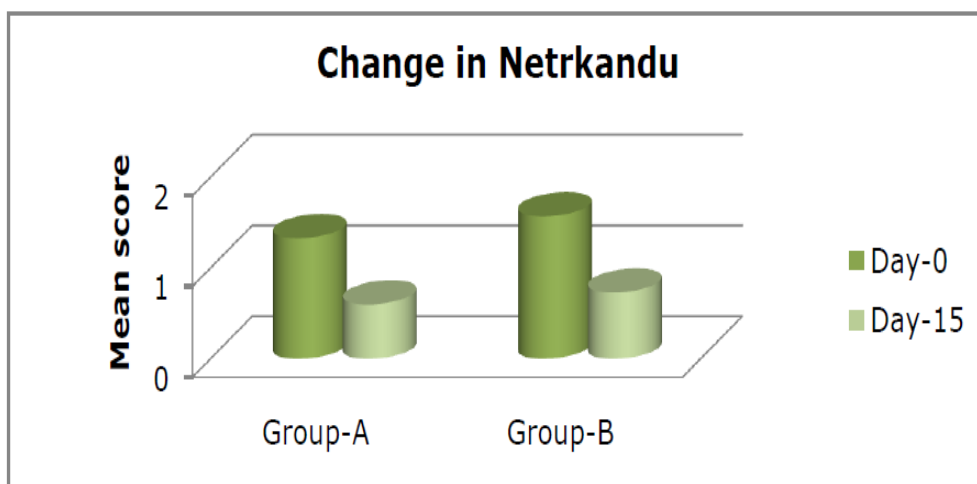
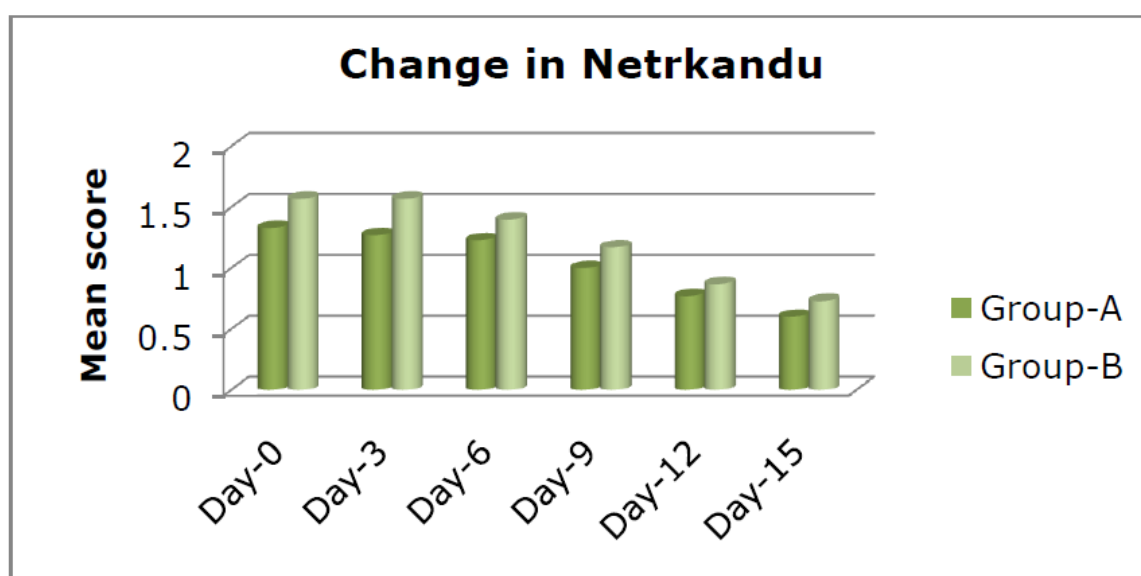


Table shows that ghrita bharjita lodhra bidalaka provide significant relief and control group olopatadine eye drop provide highly significant relief ($p < 0.001$) with 55% and 53.2% in kandu in group A and group B respectively.

Netrkandu	Group-A	Group-B
Day-0	1.33	1.57
Day-3	1.27	1.57
Day-6	1.23	1.40
Day-9	1.00	1.17
Day-12	.77	.87
Day-15	.60	.73



- Netra-Lalima wise comparison 60 patient of kaphajaabhishyanda

Netralalima	Day-0		Day-15		% Relief	Wilcoxo n Signed Ranks Test Z	P
	Mean score	Sd	Mean score	Sd			
Group-A	1.63	.765	.70	.750	57.1	4.315	<0.001 HS
Group-B	1.70	.794	.77	.728	54.9	4.089	<0.001 HS

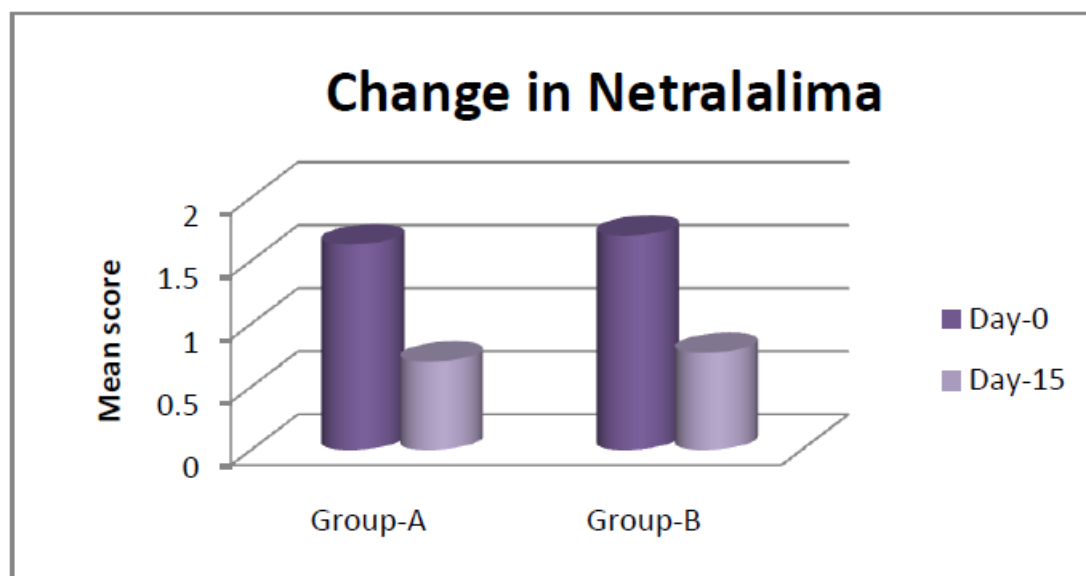
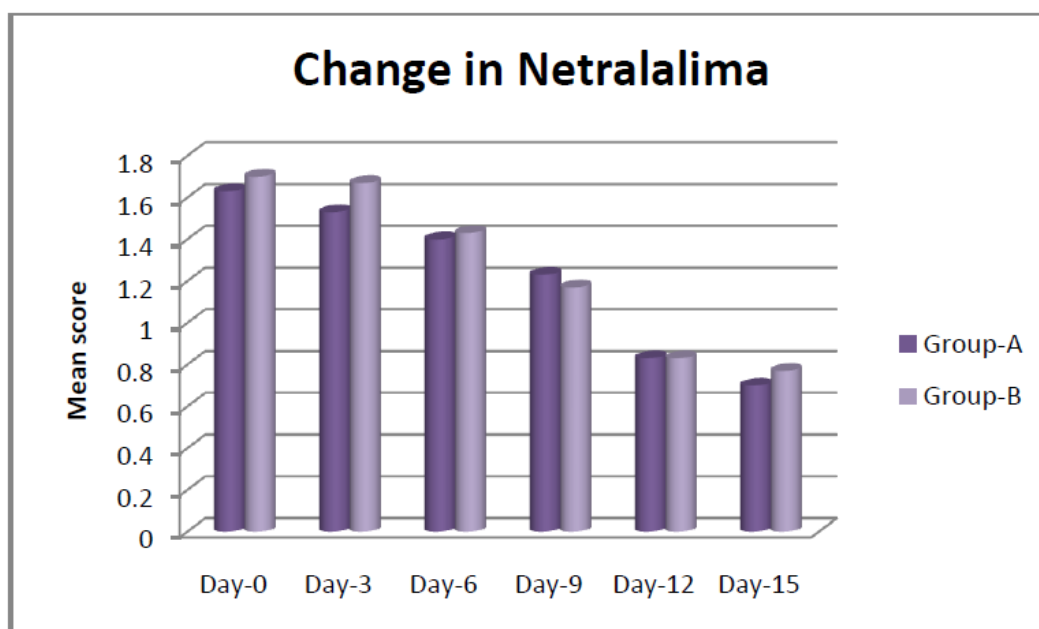


Table shows that ghrita bharjita lodhra bidalaka and control group olopatadine eye drop provide highly significant relief ($p < 0.001$) with 57.1% and 54.9% in netra lalima in group A and group B respectively.

Netralalima	Group-A	Group-B
Day-0	1.63	1.70
Day-3	1.53	1.67
Day-6	1.40	1.43
Day-9	1.23	1.17
Day-12	.83	.83
Day-15	.70	.77



• Netra-Srava wise comparison 60 patient of kaphajaabhishyanda

Netrasrava	Day-0		Day-15		% Relief	Wilcoxon Signed Ranks Test Z	P
	Mean score	Sd	Mean score	Sd			
Group-A	1.67	.758	.73	.583	56.0	4.149	<0.001 HS
Group-B	1.43	.679	.73	.583	48.8	4.066	<0.001 HS

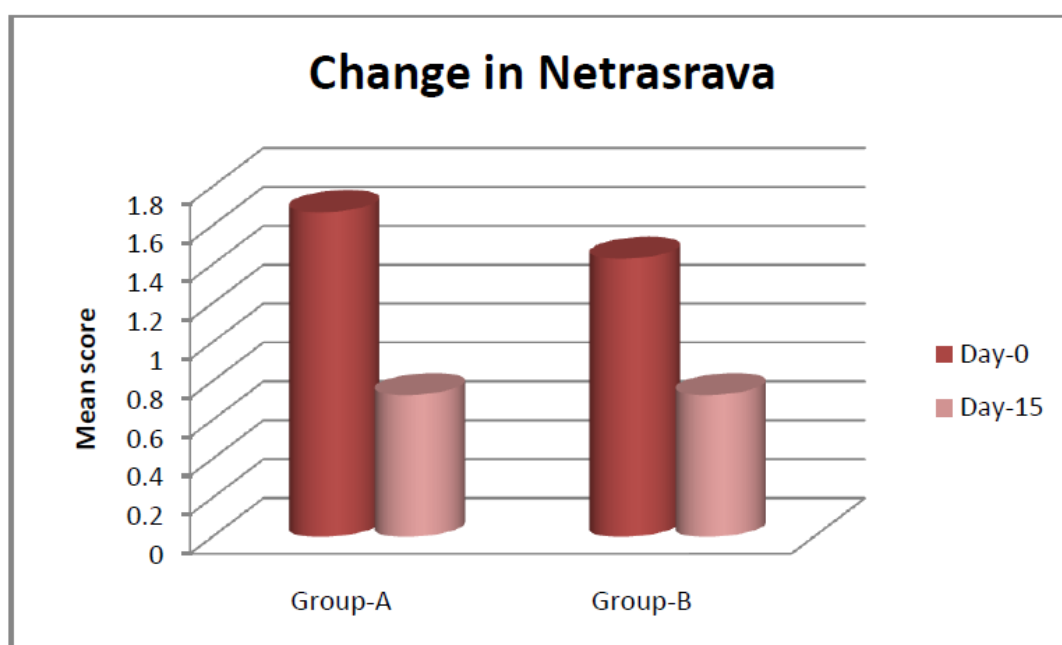
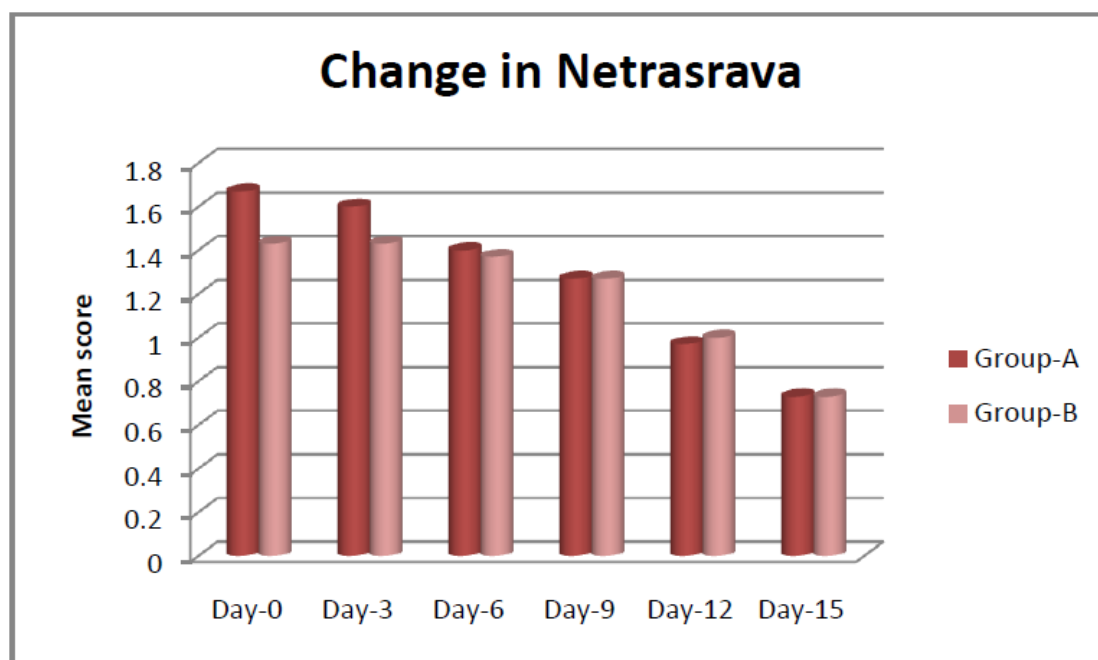


Table shows that ghrita bharjita lodhra bidalaka and control group olopatadine eye drop provide highly significant relief ($p < 0.001$) with 56% and 48.8% in netra srava in group A and group B respectively.

Netrasrava	Group-A	Group-B
Day-0	1.67	1.43
Day-3	1.60	1.43
Day-6	1.40	1.37
Day-9	1.27	1.27
Day-12	.97	1.00
Day-15	.73	.73



• Netra-Shotha wise comparison 60 patient of kaphajaabhishyanda

Netrashotha	Day-0		Day-15		% Relief	Wilcoxon Signed Ranks Test Z	P
	Mean score	Sd	Mean score	Sd			
Group-A	1.00	.830	.43	.504	56.7	3.556	<0.001 HS
Group-B	1.17	.791	.53	.571	54.3	3.661	<0.001 HS

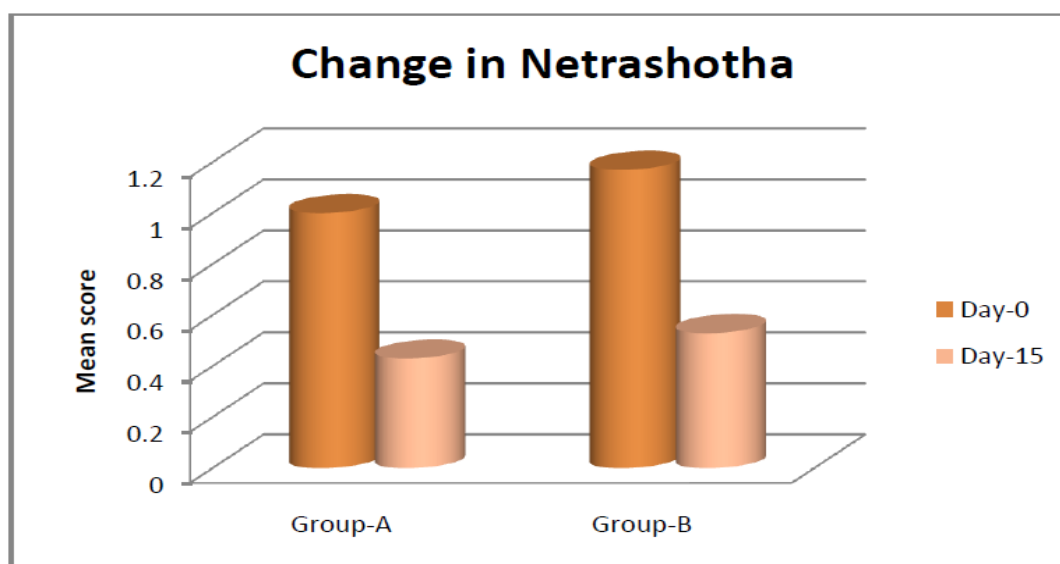
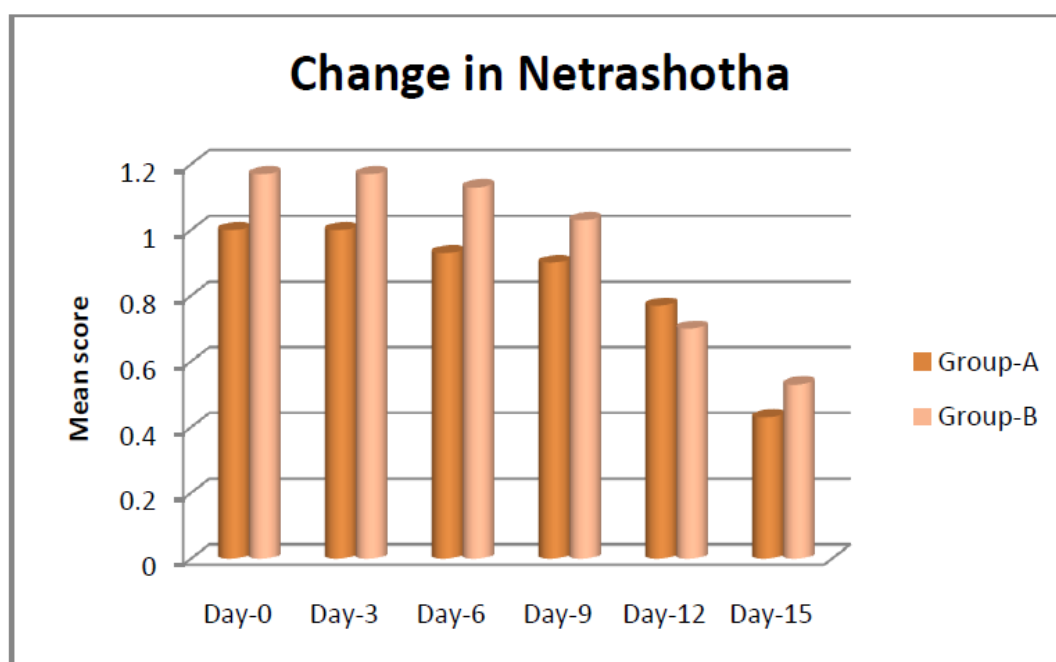


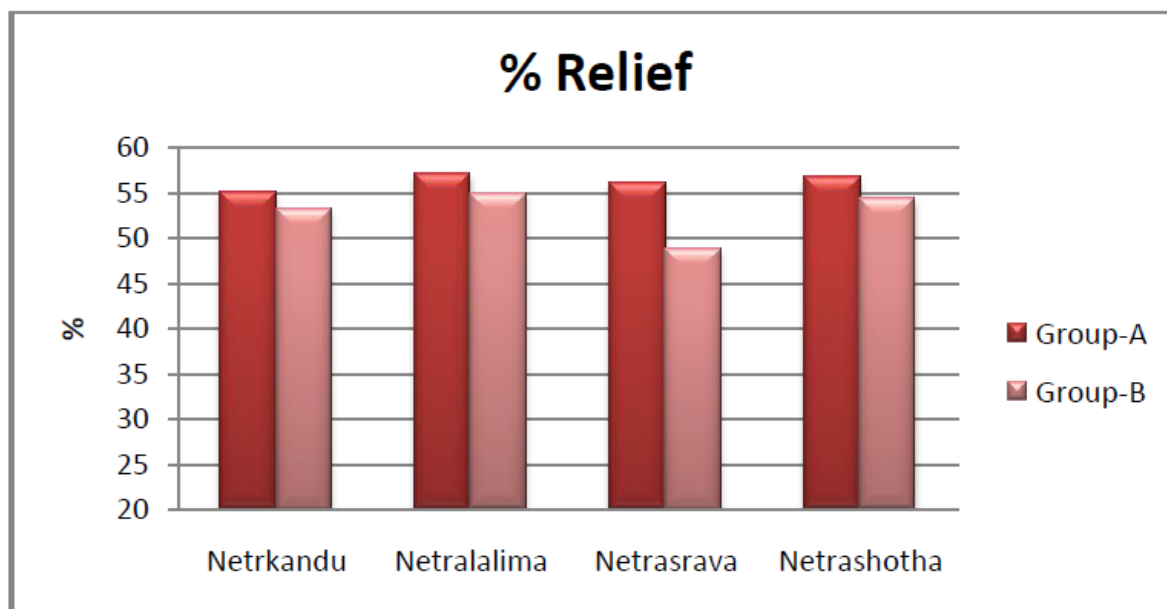
Table shows that ghrita bharjita lodhra bidalaka and control group olopatadine eye drop provide highly significant relief ($p < 0.001$) with 56.7% and 54.3% in netra shotha in group A and group B respectively.

Netrashotha	Group-A	Group-B
Day-0	1.00	1.17
Day-3	1.00	1.17
Day-6	.93	1.13
Day-9	.90	1.03
Day-12	.77	.70
Day-15	.43	.53



- Table no. 10 symptom wise comparison of 60 patient of kaphaja abhishyanda.

Symptoms	% Relief	
	Group-A	Group-B
Netrkandu	55.0	53.2
Netralalima	57.1	54.9
Netrasrava	56.0	48.8
Netrashotha	56.7	54.3



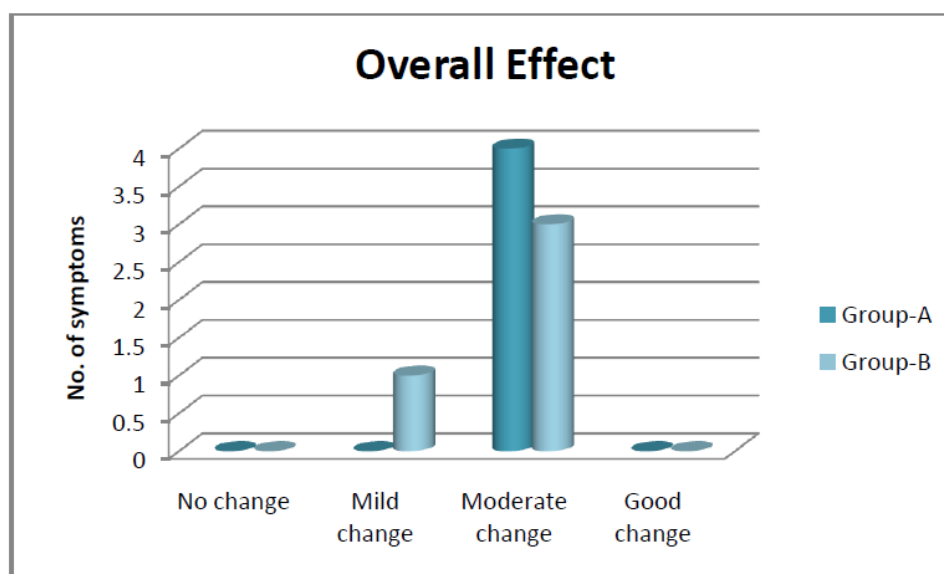
The above result show relief in percentage

- 1) Group A – Kandu (55.0), Netra lalaima (57.1), Netra srava (56.0),netra shotha (56.7).
- 2) Group B – Kandu (53.2), Netra lalima (54.9), Netra srava (48.8),Netra shotha (54.3),

Table no.11: Total score comparison of 60 patient of kaphaja Abhishyanda.

- Overall effect comparison of 60 patients of KaphajaAbhishynda.

Overall Effect	No. of symptoms	
	Group-A	Group-B
No change (<25%)	-	-
Mild change (25% – 49.9%)	-	1
Moderate change (50% -74.9%)	4	3
Good change (75% +)	-	-



Above distribution shows that in group A there were 4 symptoms with moderate change. Similarly in group B there was only 1 symptom with mild change and 3 symptoms with moderate change in symptoms if kaphaja abhishyanda.

- **Comparative effect of treatment on the symptoms in the trial and control group.**
- **comparative effect of both drug on kandu.**

Netrkandu	Mean difference score	Sd	Mann-Whitney Z	P
Group-A	.73	.944	0.645	0.519 NS
Group-B	.83	.791		

The mean difference score in the control group B(0.83) was found greater than the mean difference score of trial group A(0.73). This suggests that the treatment given to the control group B is more effective for this symptom than that of the treatment given to the trial group A.

But according to the Mann Whitney Z test, the difference between two groups was found non-significant, as the calculated $p > 0.05$. From this we can conclude that the treatment given to both two groups was equally effective on this symptom.

- **Comparative effect of both drug on netra lalima**

Netralalima	Mean difference score	Sd	Mann-Whitney Z	P
Group-A	.93	.691	0.290	0.772 NS
Group-B	.93	.868		

The mean difference score in the trial group A(0.93) was found equal to the mean difference score of control group B(0.93). This suggests that the treatment given to the trial group A is equally effective for this symptom than that of the treatment given to the control group B. But according to the Mann Whitney Z test, the difference between two groups was found non significant, as the calculated $p > 0.05$. From this we can conclude that the treatment given to both two groups were equally effective on this symptom.

- **Comparative effect of both drug on netra srava.**

Netrasrava	Mean difference score	Sd	Mann-Whitney Z	P
Group-A	.93	.868	1.263	0.207 NS
Group-B	.70	.702		

The mean difference score in the trial group A(0.93) was found greater than the mean difference score of control group B (0.70). This suggests that the treatment given to the trial group A is more effective for this symptom than that of the treatment given to the control group B.

But according to the Mann Whitney Z test, the difference between two groups was found non significant, as the calculated $p > 0.05$. From this we can conclude that the treatment given to both two groups were equally effective on this symptom.

- **comparative effect of all drug on netra shotha**

Netrashotha	Mean difference score	Sd	Mann-Whitney Z	P
Group-A	.57	.728	0.559	0.576 NS
Group-B	.63	.765		

The mean difference score in the control group B(0.63) was found greater than the mean difference score of trial group A(0.57). This suggests that the treatment given to the control group B is more effective for this symptom than that of the treatment given to the trial group A.

But according to the Mann Whitney Z test, the difference between two group was found non significant, as the calculated $p > 0.05$. From this we can conclude that the treatment given to both two groups were equally effective on this symptom.

DISCUSSION AND CONCLUSION

Discussion on obtained observation and result of treatment in as follows.

Age

Highest incidence of Kaphaja Abhishyanda was reported in age group of 10-15 years.i.e. 60%. According to ayurved usually this age group is of kapha prakriti and usually this group is affected more due to more exposure to the environment and allergens.

Gender

In present study, maximum number of patients were male i.e. 65% followed by female 35%. Highest incidence was observed in male because male are tend to expose to the hot, dry, dusty environment and expose to the allergens. Similarly infemales who are at the work where they tend to expose the climate mentioned above are known increase the risk of spring catarrh.

Religion

Majority of the patient were found to belong to hindu community 83.3%, followed by 11.7% of Buddhist community and 5.0% from muslim community. The religion criterion doesn't have any significant influence with the disease. So, geographical high population of Hindus in the area may be the reason for its higher incidence of disease in Hindu.

Socio-economic status

In the present study most of the patients were from middle class(78.3), followed by (15.0%) lower class and very few were from high class or rich class (6.7%). This data reflects that the people from middle and lower class, they tend to expose to the extreme environment like sunny, dusty, hot environment than the high class community and hence incidence rate of the disease is higher in those 2 communities.

Family history – In the present study, (15%) patients were having family history of allergy and (85%) patients were without family history. Heredity is also one of the causes of occurrence of disease and is seen in (15%) patients.

Effect of treatment on sign and symptoms

The effect of therapies was assessed on each sign and symptoms of kaphaja Abhishyanda. The signs and symptoms were given score before and after treatment and were assessed statistically to see the significance. The effect of both trial group and control group treatment on each symptom was as follows.

Netra Kandu

Kandu is due to vitiation of kapha dosha. Here the action of Lodhra is kaphaghna and kaphapittaprashmaka doshaghna. The lekhana property of katu vipaka of Lodhra relieves the kandu of kapha dosha. Due to above property of lodhra drug relieves the netrakandu of kaphaja abhishyanda.

Netra Lalima

Lalima is due to vitiation of pitta dosha. Lodhra has the kaphapittaprashmaka property and it is useful in raktavikara. Due to above property of lodhra relieves the netralalima of kaphaja abhishyanda.

Netra Srava

Srava is also due to the vitiation of kapha dosha. Kashaya rasa has properties of shoshan. Due to above property of shoshan of kapha, lodhra relieves the netra srava of kaphaja abhishyanda.

Netra Shotha

Shotha is also due to the vitiation of kapha dosha. Her shotha is cured due to lekhana property of katu vipaka and ruksha guna of lodhra. Due to above property lodhra relieves the netra shotha of kaphaja abhishyanda. The ethanolic extracts of *Symplocos racemosa* significantly suppress the inflammation. It has analgesic and anti-inflammatory.

Probable mode of action of formulation of bidalaka

Topically applied ophthalmic drugs are primarily used for local effect rather than systemic absorption. In bidalaka drugs are applied on closed eye lid except eyelashes of patient which cover whole region of eye. Due to its ushna guna vasodilation occurs and lekhana of kapha, prasarana of strotas takes place. In kaphaja Abhishyanda ushna abhinanada lakshana is mentioned and here kaphapittaprashmaka drug lodhra is used.

Probable mode of action of formulation ghritha bharjita lodhra bidalaka

Kandu is relieved due to lekhana of kapha, here katu vipaka of lodhra has lekhana property and is supported by kaphapittashamaka property. Here is the katu vipaka having kandughna property.

Shotha is cured due to same lekhana kapha by katu vipaka and ruksha guna. Srava is cured by kashaya rasa which is having property of shoshana.

As shotha and kandu are relieved, netra lalima is relieved, as it is associated with shotha.

Ghritha has sanskaranuvartan and yogavahi property which helps in enhancing the kandughna, shothahara, vedanasthapana properties of lodhra.

CONCLUSION

At the end of the study, following conclusions can be drawn on the basis of observations made, results achieved and through discussions in the present context.

- ❖ Samhitas have described vitiation of kapha is the main cause in the disease Kaphaja Abhishyand. This is supported clinically as maximum number of the patients showed Kaphaprakopa hetus as the cause.
- ❖ Kaphaja Abhishyanda can be compared with Spring catarrh on account of its clinical manifestations.
- ❖ Incidence of the disease is higher in young age group of 10-15 years with higher prevalence in males than females.
- ❖ The Pratyatma lakshanas Kandu, Picchil srav, Netra lalima and Netra shotha were the common presentation in all patients.
- ❖ The drugs chosen for the study are having kashaya rasa, katu vipaka, Ruksha guna and Kaphapitta Shamaka properties. So by their virtues, they help in dissolving the Samprapti of Kaphaja Abhishyanda.
- ❖ From the clinical study it was concluded that Ghritha Bharjita lodhra Bidalaka is an effective remedy for the management of Kaphaja Abhishyanda.
- ❖ By statistical analysis, it is concluded that Ghritha bharjita lodhra shows significant result in reducing majority of signs and symptoms of Kaphaja Abhishyanda.
- ❖ On comparing both trial groups regarding overall effect of drugs, we can conclude that Ghritha Bharjita lodhra Bidalaka is slightly more effective than Control Group olopatadine

0.1% eye drop.

- ❖ There has been significant decrease in signs and symptoms of KaphajaAbhishyanda. But in case of Kandu control group drug is more effective. While in case Netra lalima both trial group and control group is equally efficient. In netra srava trial group drug is slightly more effective than the control group. In case of Netra shotha control group drug is slightly more effective than trial group of Bidalaka.
- ❖ No major adverse or side effects were encountered during treatment period.
- ❖ It is seen that Local application (Bidalaka) is slightly effective. And hence finally conclusion can be made like efficacy of Ghrit Bharjit Lodhra Bidalaka is slightly more effective than the control group olopatadine (0.1%) eye drop.