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Clinical Study On The Add-On Effect Of Bhringaraj Yashtimadhu Siddha Taila Pratimarsh Nasya In Simple Myopia

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ABSTRACT:
Myopia is a prevalent ocular disorder with profound personal, societal, educational, and economic implications. Despite advancements in corrective techniques, no definitive measures exist to halt its progression, and available interventions are associated with certain risks. In Ayurveda, myopia bears close resemblance to Timira, particularly involving the first and second Patala, with similarities in clinical features, anatomical structures, and pathogenesis. Ayurvedic management emphasizes Kriya-kalpas (topical ocular therapies) for addressing such conditions. Severe cases of myopia often impair sustained near vision and lead to blurred perception of distant objects. With this background, the present study explores the efficacy of Bhringaraj Yashtimadhu Siddha Taila administered via Nasya therapy in the management of Simple Myopia through a clinical evaluation.
KEYWORDS: *Bhringaraj, Yashtimadhu, Taila, Nasya, Myopia, Timira, Simple Myopia*

INTRODUCTION

Myopia is the commonest type of refractive error affecting the general population globally. In myopia, parallel rays of light coming from infinity are focused in front of retina when accommodation is at rest. The prevalence of myopia in two population-based studies from Maharashtra in the age group of 29 years and above was found to be 15.3% and 17%. The school-based study noted a prevalence of 2.15% in 5–15-year-old subjects.

The only available treatment is either the correction of refraction with spectacles or the surgical line of management which includes PRK or LASIK. In Ayurveda, Myopia can be correlated with '*Timira*'. It presents itself as '*avyakta darshan*'.

Charu Bansal did a Comparative study on the effect of *Saptamrita Lauha* and Yoga therapy in myopia. The result obtained from the study reveals that there is no significant reduction in the visual acuity and clinical refraction. Poonam et al did a clinical study on the role of *Akshi Tarpana* with *Jeevantyadi Ghrita* in *Timira* (Myopia). In this study it was observed that *Jeevantyadi Ghrita* showed reduction in dioptric power.

Bhringaraj is '*netrya*' and *Yashtimadhu* is '*chakshushya*' according to some ayurvedic texts and both of these, if given in *Nasya* form can prove to be effective in Myopia. The study was undertaken after reviewing that no such studies or trials had been done in Simple Myopia with *Bhringaraj Yashtimadhu Siddha Taila Pratimarsh Nasya*.

AIM: To evaluate the efficacy of *Bhringaraj Yashtimadhu Siddha Taila Pratimarsh Nasya* in Simple Myopia.

MATERIALS AND METHODOLOGY

MATERIALS:

- **Patients -** Patients visiting Bharati Ayurved Hospital O.P.D. for Simple Myopia were recruited in the trial by following standard protocol.

- **Drug:**

Trial Group: *Bhringaraj Yashtimadhu Siddha Taila Pratimarsh Nasya* + Spectacles
Control Group: Spectacles (concave glasses)

METHODOLOGY –

Patients

The grouping of patients was done as follows:

- The study included 60 patients
- They were divided into two groups of 30 patients each.
- **Inclusion Criteria:**
- Patients between age group of 18 to 40 years were included.
- Patients were selected irrespective of gender, socioeconomic status and religion.
- Patients diagnosed with Simple Myopia and refractive power between -0.50D TO -6.00D
- **Exclusion Criteria:**
- Patients suffering from High Myopia and Pathological Myopia
- Patients suffering from any retinal and ocular surface pathologies
- Patients having congenital anomalies
- One eyed patients

SOP of Trial Group : *Bhringaraj Yashtimadhu Siddha Taila*

Method of Preparation of *Bhringaraj Yashtimadhu Siddha Taila* according to *'Snehapaka Kalpana'.*

- *Bhringaraj Churna*, *Yashtimadhu Churna* and *Tila Taila* were purchased from authentic Ayurvedic Drug Store.
- Identification & Authentication of raw materials were done at Analytical Laboratory
- Standardization of the drugs was done at the same lab.
- *Bhringaraj* and *Yashtimadhu Churna* each were collected in raw form and then converted into *Kalka*
- form.
- *Tila Taila* was heated on low flame till it became hot and then it was cooled.
- *Kalka*, *Tila Taila* and *Jala* were mixed in the ratio of 1:4:16 and heated on low flame again, until testing criteria was achieved. Standard guidelines of *Snehasiddhi Lakshanas* from *Sharangdhar Samhita* were followed.
- *Siddha Taila* was filtered using 4 layered muslin cloth and packed in 10 ml airtight plastic dropper bottles which were sterilized, then they were labelled and stored in a cool and dry place.

INTERVENTION

The patients were selected and randomized into Group A (Trial group) and Group B (Control group).

- **Group A (Trial group)** : 2 drops of *Bhringaraj Yashtimadhu Siddha Taila* were administered in both nostrils along with myopic glasses for 60 days.
- **Group B (Control group)** : Myopic glasses were prescribed.

FOLLOW UP - 15th, 30th and 45th day

TRIAL METHODOLOGY:

- Permission of the Institutional Ethics committee was obtained.
- Registration at CTRI was done.
- Screening of the patients was done in OPD. A proper Slit lamp examination, Refraction and Fundoscopy was conducted to assess and select the patient for clinical trial.
- An information sheet about the clinical trial was provided to the patient.
- Informed consent form duly signed by the patient was taken after explaining the trial.
- Findings were recorded in case record form for each patient.
- Follow up was done on 15^{th}, 30^{th} and 45^{th} day.

ASSESSMENT CRITERIA

Observations were noted in tabular form according to the following criteria of assessment.

- **Subjective parameters -**

Sr. No.	**Signs and Symptoms**	**0^{th} day**	**15^{th} day**	**30^{th} day**	**45^{th} day**

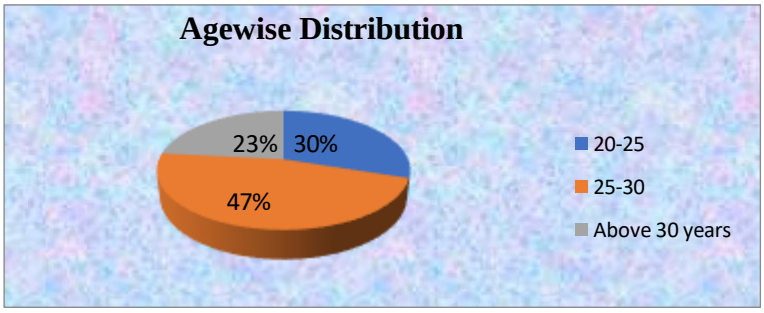
1.	Headache				
2.	Eye strain				
3.	Blurring of vision				

- **Objective parameters -**

Sr. No.	**Signs and Symptoms**	**0th day**	**15th day**	**30th day**	**45th day**
1.	Visual acuity				
2.	Reduction in refractive power				

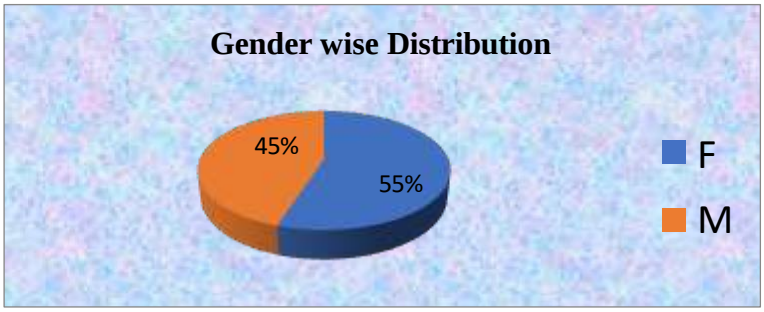
OBSERVATION AND STATISTICAL ANALYSIS

- **AGE WISE DISTRIBUTION**



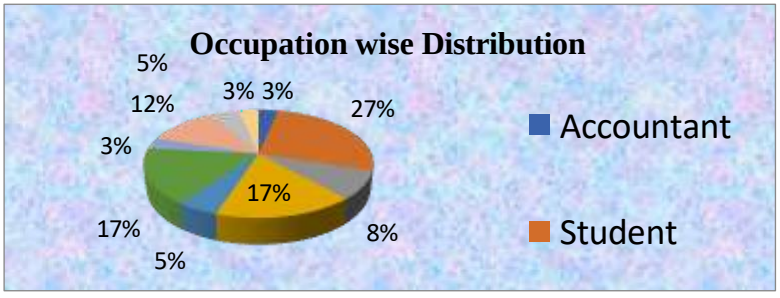
From above table we found that maximum numbers of patients were from age group 20 to 30 years.

- **GENDER WISE DISTRIBUTION**



From above table we found that in this study maximum no of patients were females.

- **OCCUPATION WISE DISTRIBUTION**



On considering nature of occupation in this study we fund maximum no of pts were students.

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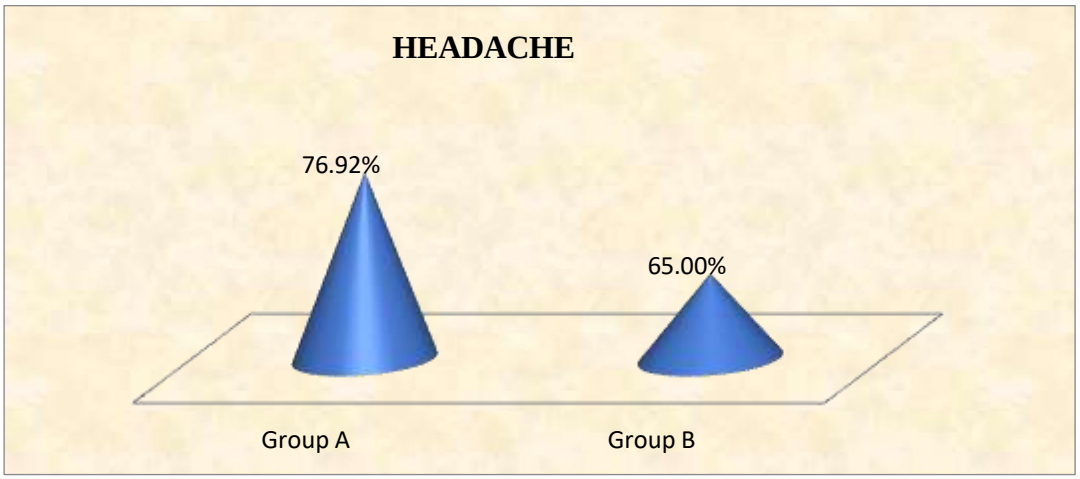
COMPARISON OF GROUP A AND GROUP B ON HEADACHE IN SIMPLE MYOPIA

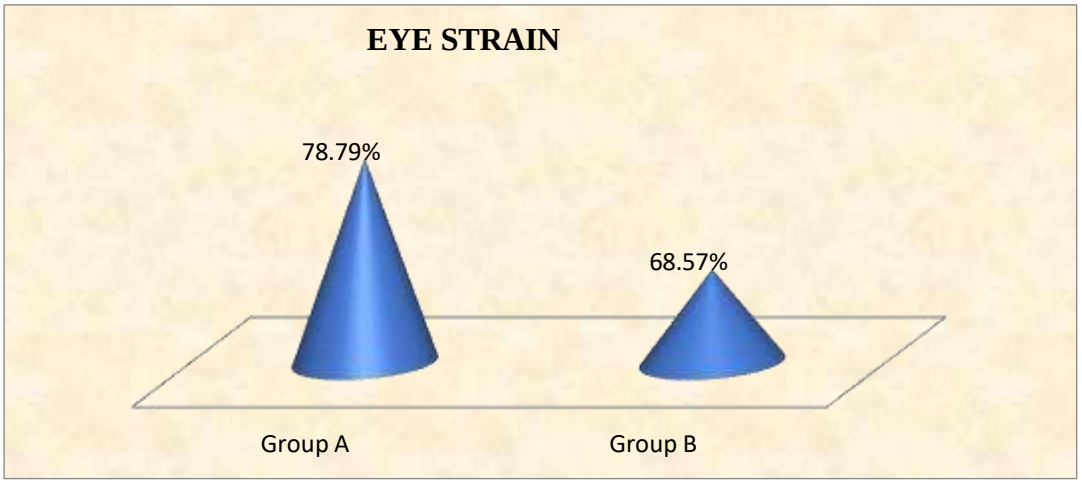
Parameter	Group	% of improvement	Mann Whitney U	z	P VALUE
HEADACHE	Group A	76.92%	375.000	-1.317	0.0188
	Group B	65.00%			



As p value<0.05 we found that there was statistically significant difference between Group A and Group B HEADACHE in Simple Myopia

Also, according to the percentage of improvement seen from the above table, we get that percentage of improvement in Group A was more than Group B hence we can say that Group A is more effective as compared to Group B on HEADACHE in Simple Myopia but the difference between them is not so significant.

COMPARISON OF GROUP A AND GROUP B ON EYE STRAIN IN SIMPLE MYOPIA



Parameter	Group	% of improvement	Mann whitney u	z	P VALUE
EYE STRAIN	Group A	78.79%	403.500	-0.910	0.0363
	Group B	68.57%			

As p value<0.05 we found that there was statistically significant difference between Group A and Group B EYE STRAIN in Simple Myopia

Also, according to the percentage of improvement seen from the above table, we get that percentage of improvement in Group A was more than Group B hence we can say that Group A is more effective as compared to Group B on EYE STRAIN in Simple Myopia but the difference between them is not so significant.

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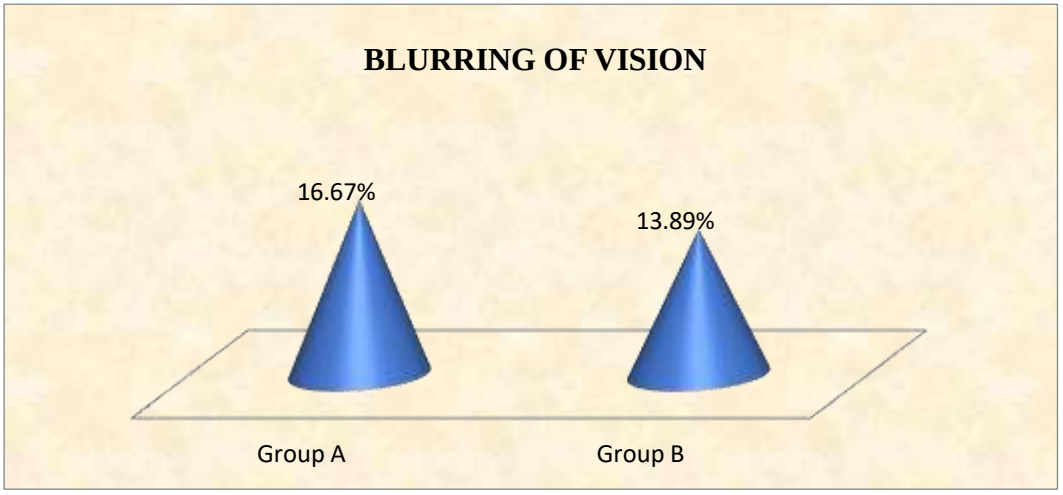
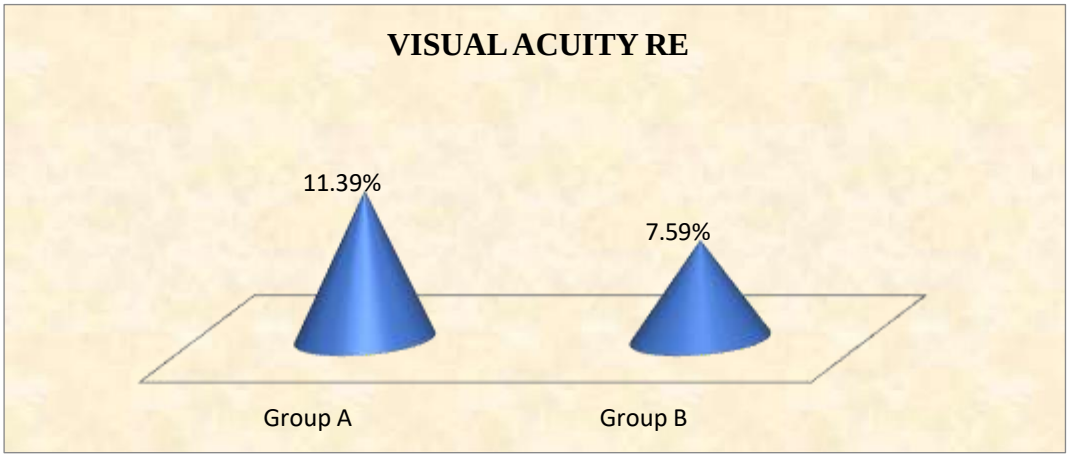
COMPARISON OF GROUP A AND GROUP B ON BLURRING OF VISION IN SIMPLE MYOPIA



Parameter	Group	% of improvement	Mann whitney u	Z	P VALUE
BLURRING OF VISION	Group A	16.67%	439.000	-0.176	0.860
	Group B	13.89%			

As p value>0.05 we found that there was no statistically significant difference between Group A and Group B on BLURRING OF VISION in Simple Myopia
Also, according to the percentage of improvement seen from the above table, we get that percentage of improvement in Group A was more than Group B hence we can say that Group A is more effective as compared to Group B on BLURRING OF VISION in Simple Myopia but the difference between them is not so significant.

COMPARISON OF GROUP A AND GROUP B ON VISUAL ACUITY RE IN SIMPLE MYOPIA



Parameter	Group	% of improvement	Mann whitney u	Z	P VALUE
VISUAL ACUITY RE	Group A	11.39%	422.000	-0.463	0.643
	Group B	7.59%			

As p value>0.05 we found that there was no statistically significant difference between Group A and Group B VISUAL ACUITY RE in Simple Myopia
Also, according to the percentage of improvement seen from the above table, we get that percentage of improvement in Group A was more than Group B hence we can say that Group A is more effective as compared to Group B on VISUAL ACUITY RE in Simple Myopia but the difference between them is not so significant.

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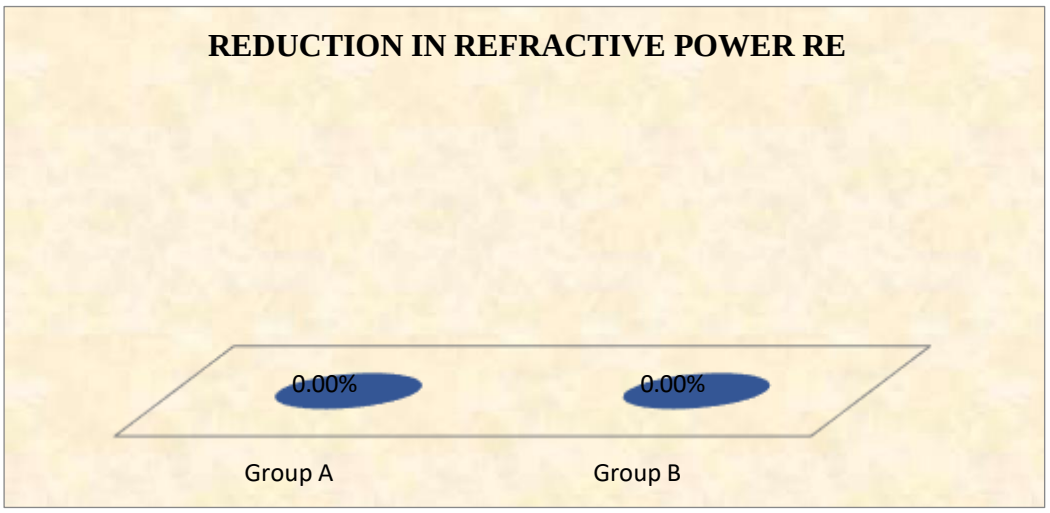
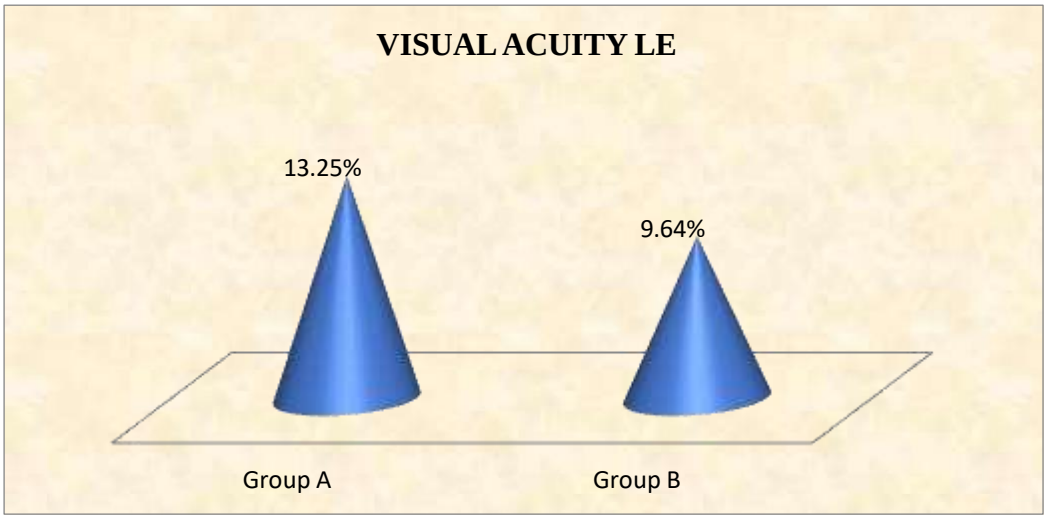
COMPARISON OF GROUP A AND GROUP B ON REDUCTION IN REFRACTIVE POWER RE IN SIMPLE MYOPIA



parameter	Group	% of improvement	Mann whitney u	z	P VALUE
REDUCTION IN REFRACTIVE POWER RE	Group A	0.00%	450.000	0.000	1.000
	Group B	0.00%			

Here both Group A and Group B were not effective on REDUCTION IN REFRACTIVE POWER RE in Simple Myopia

COMPARISON OF GROUP A AND GROUP B ON VISUAL ACUITY LE IN SIMPLE MYOPIA



parameter	Group	% of improvement	Mann whitney u	Z	P VALUE
VISUAL ACUITY LE	Group A	13.25%	421.500	-0.468	0.640
	Group B	9.64%			

As p value>0.05 we found that there was no statistically significant difference between Group A and Group B on VISUAL ACUITY LE in Simple Myopia
Also, according to the percentage of improvement seen from the above table, we get that percentage of improvement in Group A was more than Group B hence we can say that Group A is more effective as compared to Group B on VISUAL ACUITY LE in Simple Myopia but the difference between them is not so significant.

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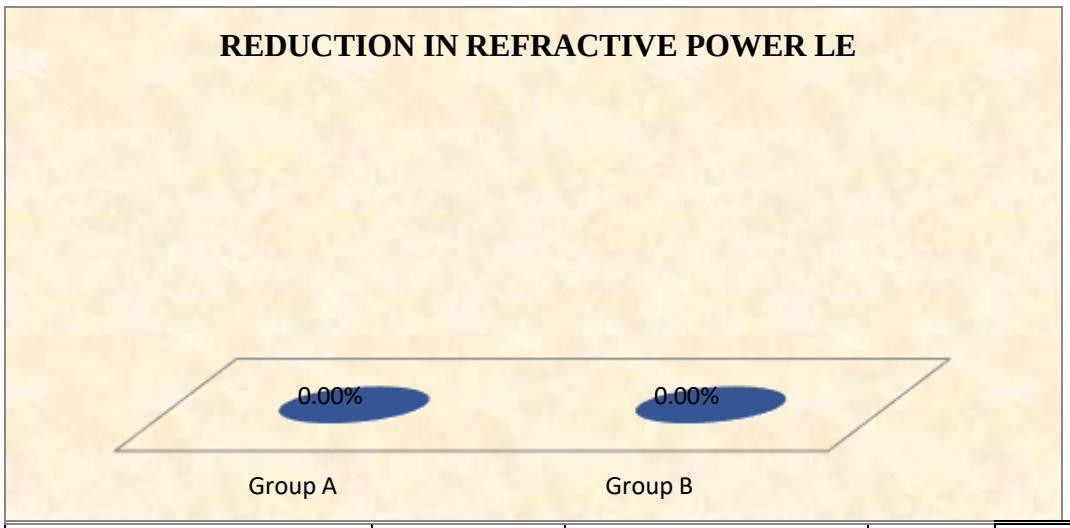
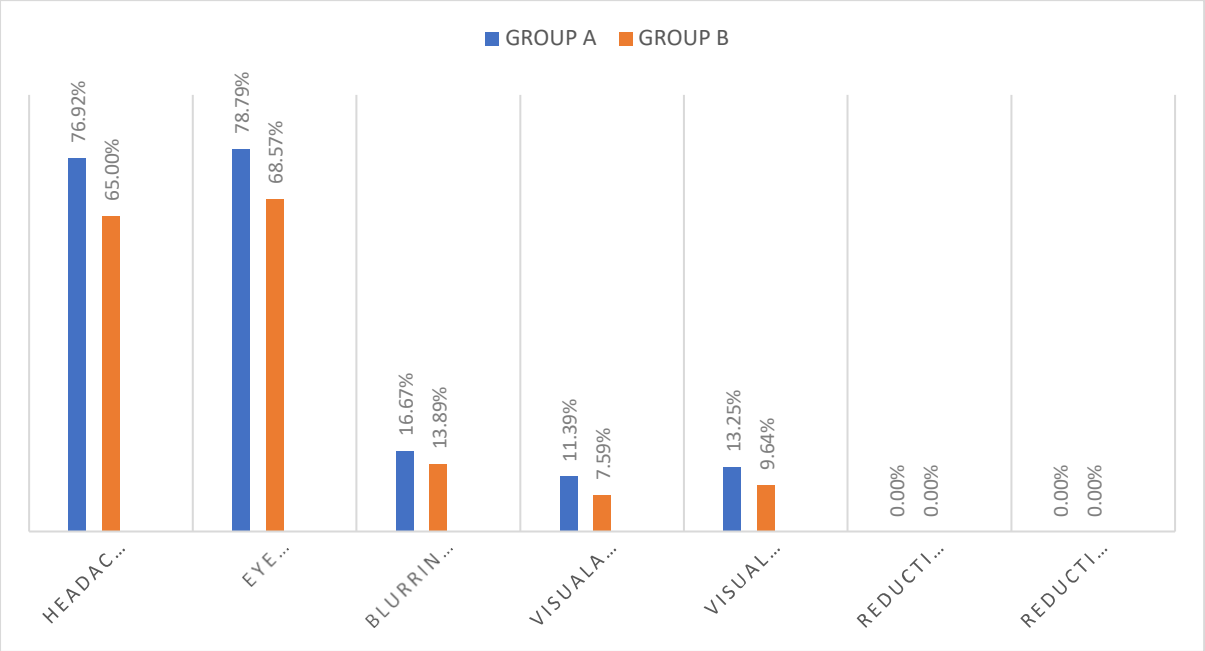
COMPARISON OF GROUP A AND GROUP B ON REDUCTION IN REFRACTIVE POWER LE IN SIMPLE MYOPIA



Parameter	Group	% of improvement	Mann whitney u	z	P VALUE
REDUCTION IN REFRACTIVE POWER LE	Group A	0.00%	450.000	0.000	1.000
	Group B	0.00%			

Here both Group A and Group B were not effective on REDUCTION IN REFRACTIVE POWER LE in Simple Myopia.

OVERALL IMPROVEMENT



From the above graph, it is seen that Group A is more effective as compared to Group B in Simple Myopia but the difference between them is not so significant.

DISCUSSION

This chapter elaborates on the theories of *Timira* described in the classical Ayurvedic texts and relates them to its modern equivalent, Simple Myopia. *Timira* is classified under *Drishtigata Vikara* by all Acharyas, though their opinions on the number of entities differ. Vā¯gbhaṭ.a describes twenty-seven

Drishtigatarogas, identifying six varieties each of *Timira, Kacha,* and *Linganāsha*. In contrast, Suś´ruta enumerates only twelve, as he considers *Timira, Kacha,* and *Linganāsha* to be successive stages of the same pathological continuum rather than distinct conditions. According to Suś´ruta, the affliction begins when vitiated *doshas* invade the first and second *patala*, producing *Timira*. Involvement of the third *patala* manifests as *Kacha*, while the fourth *patala* leads to *Linganāsha* or complete blindness. Etymologically, *Timira* signifies "darkness," a metaphor for the progressive impairment of vision, ranging from indistinct or blurred vision (*Avyakta Darshana*) to absolute blindness (*Linganāsha*).

Modern ophthalmology defines myopia as a refractive error in which parallel rays focus in front of the retina, resulting in diminished or blurred distant vision. Clinically, it is categorized as simple (low) myopia and pathological (progressive) myopia. Epidemiological studies indicate a growing prevalence worldwide, particularly among East Asian populations, where rates are nearly double those observed in Caucasians. In India, surveys report prevalence rates ranging between 6.9% and 19.7% for simple myopia. Despite its widespread occurrence, myopia remains irreversible in its progression, and existing corrective strategies offer only symptomatic relief. Moreover, these interventions pose several drawbacks, including complications from contact lens use, post-surgical haze or scarring, high costs, and limited applicability in younger individuals. Importantly, none of these methods address the underlying etiological factor of axial elongation.

Given these limitations, exploration of Ayurvedic literature becomes particularly relevant. The conceptual overlap between *Timira* and simple myopia—in terms of symptoms, anatomical involvement, and pathogenesis—highlights the potential of Ayurvedic approaches in addressing the condition. Classical therapies, especially *Kriya-kalpa* interventions such as *Nasya*, warrant systematic clinical evaluation to provide safe, sustainable, and holistic alternatives for managing simple myopia.

Discussion On The Selected Topic –

Clinical trial schedule adopted for the study:

- **Sample size** - 60 patients having Simple Myopia
  - Group A (Trial Group) - Patients were advised *Bhringaraj Yashtimadhu Siddha Taila Pratimarsh Nasya* once a day along with spectacles.
  - Group B (Control Group) - Patients were advised only spectacles.
- **Age group** - Most patients registered were from the age 25 to 30 years
- **Gender**- Among 60 patients in the study, 27 (45%) were males and 33 (55%) were female patients
- **Occupation** – Most of the patients were found to be students.
- **Probable Mode of Action**The therapeutic action of *Bhringaraj Yashtimadhu Siddha Taila Pratimarsh Nasya* in Simple Myopia can be explained on the basis of Ayurvedic principles as well as pharmacological properties of its ingredients. In Ayurveda, Simple Myopia is correlated with the early stages of *Timira*, where vitiated *doshas* affect the ocular *patala*, leading to blurring of vision.

Tila Taila, used as he base for *Nasya*, possesses *snehana* and *balya* properties that nourish and strengthen the ocular tissues, particularly the optic nerves. *Bhringaraj* and *Yashtimadhu* are classified as *Chakshushya* drugs and are endowed with anti-inflammatory, rejuvenating (*rasayana*), and ocular tonic properties, which help improve extraocular muscle function and reduce ocular fatigue.

The nasal route of administration (*Nasya karma*) plays a vital role, as it directly influences the *Shiras* (head region). Regular *Pratimarsh Nasya* facilitates the clearance of subtle channels (*srotas*), balances *Vata* and *Kapha doshas*, and enhances ocular circulation. This may result in better nourishment of ocular structures, reduction of strain, and improved visual clarity.

CONCLUSION

- The main aim of this research was to evaluate the therapeutic effectiveness of *Bhringaraj Yashtimadhu Siddha Taila Pratimarsh Nasya* in treating simple myopia.
- During the study and the follow-up period, no adverse or toxic effects were observed, suggesting a positive safety profile.

Upon reviewing the overall results, the trial group showed slightly better improvement in subjective parameters compared to the control group, although there were no statistically significant differences in objective parameters.

REFERENCES:

1. Dalhan. Sushruta Samhita Nibandsangraha. Varanasi: Chaukhambha Sanskrit Sansthan; 2019; 606. 7/6
2. Dalhan. Sushruta Samhita Nibandsangraha. Varanasi: Chaukhambha Sanskrit Sansthan; 2019; 606. 7/7-14
3. Dalhan. Sushruta Samhita Nibandsangraha. Varanasi: Chaukhambha Sanskrit Sansthan; 2019; 606. 7/15-17
4. Shastri AD, editor. Sushruta Samhita. Varanasi: Chaukhambha Sanskrit Sansthan; 2002;
5. 32.15th edition.7/7-10
6. Pan C-W, Dirani M, Cheng C-Y, et al. The age-specific prevalence of myopia in Asia: a meta-analysis. Optom Vis Sci 2015; 92:258–66
7. Rudnicka AR, Owen CG, Nightingale CM, Cook DG, Whincup PH. Ethnic differences in the prevalence of myopia and ocular biometry in 10- and 11-year-old children: the Child Heart and Health Study in England (CHASE). Invest Ophthalmol Vis Sci. 2010 Dec;51(12):6270-6.
8. Agarwal A, Text book of Ophthalmology. New Delhi: Jaypee brothers; 2002; Vol 1, 21. P.166.
9. Jain IS, Jain S, Mohan K. The epidemiology of high myopia—changing trends. Indian J Ophthalmol 1983; 31:723-8.
10. Vitale S, Sperduto RD, Ferris FL III. Increased prevalence of myopia in the United States between 1971-1972 and 1999-2004. Arch Ophthalmol 2009; 127:1632–9.
11. Bar Dayan Y, Levin A, Morad Y, et al. The changing prevalence of myopia in young adults: a 13-year series of population-based prevalence surveys. Invest Ophthalmol Vis Sci 2005; 46:2760–5.
12. AK Khurana. Comprehensive ophthalmology. 7 th. JAYPEE BROTHERS; 2019. 1-662 p. jack j kanski. clinical ophthalmology. 2023