



A Single Case Study on the Effect of Formulations Pathyadi Varti and Mahatriphala Ghrita in Prathama Patalagata Timira W.S.R. To Myopia

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ABSTRACT

Myopia is the most common type of refractive error seen in children and young people. When the eyeball is at rest without accommodation unable to focus the parallel light rays exactly on macula but focused in front of it is called Myopia. Myopia is commonly known as short sightedness. Some of the symptoms of vataja Timira and myopia are same. Timira is the drishtigata roga described by Sushruta. Timira begin with the blurring of vision gradually leading to the deterioration of the eyesight. As per classical text the lakshanas are bhramantiva sa pasyati, aavil darshan, vyavidha darshan, aruna darshan.

Material and methods:

A 20yr female came to Shalakya Tantra OPD at RP Karadi Ayurvedic Hospital, Ilkal, Karnataka of Shalakya Tantra department with chief complain of defective vision for both eyes during clinical camp at hospital. He was having pain in both eyes, watering from both eyes since 15 days. He was treated with pathyadi varti anjana and Mahatriphala ghrita orally for one month. Patient is followed up after two months from the day of medicine given. Medicine prepared at pharmacy of Sri Vijay Mahantesh Ayurvedic Medical college and hospital's Nagarjuna Pharmacy.

Result:

At the end of the study improvement in visual acuity of both eyes found. Improvement in relief from pain in both eyes and the watering also reduced from both eyes. A single case study was taken up to access the efficacy in Timira W.S.R. to Myopia and it is found to have promising results.

Conclusion:

Pathyadi varti Anjana shown improvement in the clarity of vision. Along with Pathyadi varti applying externally and Mahatriphala ghrita orally. Further study with larger sample size has to be done and with different stages of myopia for further evaluation.

Key words: Anjana, Mahatriphala ghrita, Pathyadi Varti, Timira, Myopia

INTRODUCTION

Myopia or short sightedness also known as near sightedness is a refractive error of the eye. In myopia light is focused in front of the retina. Due to this the distant object looks blurry and near object seen normal. This is mostly found in children and young adults. Asian people are mostly suffering from myopia. This is mostly found in (16-18) yrs old high school students. Uncorrected refractive errors are most common cause of visual for visual impairment and second major cause for avoidable blindness in India. The proportion of blindness due to refractive errors have increased to 19.7%. 3/4th of visual impairment attributed due to the refractive errors¹. The cause of this disease is due to both genetic and environmental factors³. Myopia is having linked to socio-economic factor. Higher education, better housing, higher monthly income, professional occupation of parents and their children inherit myopia. Excess of reading, writing, computer work, playing video games responsible for myopia. In this disease if we observe the patho physiology the ciliary muscles are completely



relaxed, the light rays coming from distant object are focused on retina. This may be due to too long eyeball or too much refractive power in the lens system of the eye. There is no method to decrease the strength of its lens than that exists when ciliary muscle is relaxed completely myopic person has no mechanism to focus distant objects sharply on retina. When an object is nearer to eye finally gets closer that its image get focused². Symptoms of this disease are blurred vision, distorted vision, eye strain in doing near work, headache, squinting of eyes. Lens used to correct myopia. Power can be corrected by placing concave lens in form of spectacle or contact lens.

In Ayurveda Myopia can be correlated to Timira. The gradual loss of vision leading to blindness is called Timira. As per Sushruta⁴ Timira, Kacha, linganasha are the stages of same disease and in last it causes blindness. Prathama patalagata Timira is when vitiated dosha get sthanasamsraya in eye reaching prathamapatala of the eye. The patient will have blurred vision. This is termed in different way by Charaka, Sushruta, vagbhata. Sushruta said it avyakta darshana, vagbhata said animitta avyakta roopa darshana and Madhava⁵ said kadachit roopa darshana. Treatment of prathama patalagata timira as per Ayurveda is ghrutapana, nasya, virechana, basti, kriyakalpa like anjana, siravedha etc to be done. In this case study I have taken Ghrutapana (Internally) and Anjana (externally).

Materials and methods:

Pathyadi varti is prepared in the Nagarjuna pharmacy of Sri Vijay Mahantesh Ayurvedic Medical college. The reference of Sushruta samhita for varti and Bhaishajya ratnavali for Ghruta are followed.

Pharmaceutical preparation:

Pathyadi varti-

Raw drugs are Haritaki (Terminalia Chebula), Yastimadhu (Glycyrrhiza Glabra), Maricha (Piper Nigrum), Tuttha (Copper sulphate). Tuttha purified by seven times mixing lemon juice. All other three drugs are made fine powder. They are taken in ratio Haritaki: Yastimadhu: Tuttha: Maricha in 1:1:1:16. They all are mixed in khalwa (mortar and pestle) through water and made varti by hand. They are dried up in chaya Sushka. 500mcg size varti are prepared.

Mahatriphala Ghruta:

This is prepared by decoction of all the kwath dravyas and then collected kwatha is snehapaka with Go ghruta and added with Aja dugdha. After proper paka of ghee other powders/prakshepa dravya are added in it. Then the ghee made cold and packed in bottles. These varti are packed in air tight plastic container and ghee in the plastic bottles of 200GM and 100GM bottles.

Table No 1: Ingredients of Pathyadi Varti (Su.Ut-18/105)

Sl.No.	Ingredients	Quantity taken
1	Fruit of Terminalia Chebula	250gm
2	Purified Tuttha (CuSO ₄)	250 gm
3	Root of Glycyrrhiza Glabra	250 gm
4	Fruit of Piper Longum	4000 gm

Ingredients of MAHATRIPHALA GHRITA (B.R-64/249-256)

Sl.No.	Ingredients	Quantity taken
	For decoction	
1	Decoction of Triphala	5liters
2	Whole plant juice of Eclipta Alba	5liters
3	Leaves juice of Adhatoda Vasica	5liters
4	Rhizome juice of Asparagus Racemosa	5liters
5	Stem juice of Tinospora Cordifolia	5liters
6	Fruit juice of Emblica Officinalis	5liters
7	Cow Ghee	5kgs
8	Goat milk	5liters
	Kalka dravyas	
1	Fruit of Piper Longum	125 gm
2	Fruit of Terminalia Chebula	125 gm
3	Fruit of Terminalia Bellerica	125gm

4	Fruit of Emblica Officinalis	125gm
5	Stem of Tinospora Cordifolia	125gm
6	Panchanga of Nymphaea stellata	125gm
7	Fruit of Vitis Vinifera	125gm
8	Root of Glycyrrhiza Glabra	125gm
9	Rhizome of Asparagus Racemosus(For Kshirakakoli)	125gm
10	Whole plant of Solanum Xanthocarpum	125gm
11	Crystalline sugar(Sarkara)	125gm

Trial Drug Photos



a. Preparation of Kwatha(Decoction)



B. Preparation of ghritaPaka



c. Preparation of Pathyadi Varti



D. Packed Trial Drugs



The preparation of Mahatriphala ghrita took five days from ghrita paka, preparation of kwatha to packing of medicine in bottles. The ghrita siddhi lakshana of Phena shanti⁷ also obtained.

Table No. 2 Organoleptic Characteristics of Mahatriphala Ghrita

State	Semi liquid
Colour	Greenish
Smell	Pleasant characteristic ghee smell
Touch	oily
Total quantity taken	5liters
Total quantity obtained	4.5liters
Loss percent	10%

CASE STUDY:

History of Patient:

A male patient of age 20 years has the chief complains of difficulty in reading for topics in the class and lack of proper vision for distant objects for 15 days reached at OPD on the basis of Myopia camp scheduled. Table 3 shows the different complaints and associated complaints of the patient. The onset was gradual. He was difficulty in watching the blackboard and power point presentation from last bench of the class. He had severe headache, watering from the eye on constant seeing TV and mobile phones. When he watch small objects or try to put thread in needle develop watering from eye. Excess tiredness reduced on putting some eye drops cold sponging. He saw these symptoms are persistently remaining and try to consult hospital during clinical camp advertised in newspaper pamphlets. He doesn't study after 10 PM due to tiredness. He didn't want to wear spectacles and consult our hospital for treatment.

Table 3

Main complaint	Gradual/sudden	Duration
Diminished vision	Sudden	15Days
Associated Symptoms	Right eye/Left eye/Both eyes	Duration
Watering from eye, Headache	Both eye	3months

Family History:

His parents are hardworking and no one using spectacles. He was the only child in his family.

Personal History:

He is a non-vegetarian. Use to have long time watching TV habit. Lack of proper sleep. Bowel evacuation is two times and clear. Stool is normal in color and consistency. Micturition also normal. He has good appetite and feeling hungry in the middle of night. He has no addiction habits.

Physical Examination:

All physical states are normal in range. As per the Ayurveda Astasthanana pareekshya is performed given in Table 4

Table 4: Astasthanana Pareekshya

Nadi	78/min
Mootram	Prakruta
Mala	Prakruta
Jihwa	Anupalipta
Sabdham	Prakruta
Sparsha	Sheeta
Drik	Dosha in drushti
Akriti	Prakruta

Examination of Eye⁸:

Sclera, conjunctiva, eyelid, eyebrow, eye lashes, cornea structures of both eyes are normal. The functional eye examination was done by Snellen's chart. The treatment progress is given in Table 5



Table 5- Vision Test 1 Before Treatment (B.T.)

Date	Treatment Progress	Right Eye(D _v)	Left Eye(D _v)
10/01/2023	B.T.(0 Day)	6/12 Partial	6/18 Partial

Treatment:

Patient is advised to apply pathyadi varti in the form of Anjana in anjana shalaka with honey at morning and evening before sunset two times. Take Mahatriphala Ghrita 5Gm with lukewarm water twice after food for 30 days and to come hospital on 30th day, 45th day and 60th day.

Observation:

Patient had felt the difference of getting relaxation and headache reduced. He got soothing effect in eye. Vision got cleared. Patient complains of mild burning sensation in eyes while applying varti with honey for 1 minute and it getting subsides automatically. The symptoms of headache, watering from eyes, get reduced. Patient have added benefit of good sleep.

30th Day:

Patient has clear vision. No problem of sleep. Still he is having headache.

Date	Treatment Progress	Right Eye(D _v)	Left Eye(D _v)
10/02/2023	30 th day	6/12	6/12

45th Day:

Patient got relieve from headache . Watering from eyes also reduced.

Date	Treatment Progress	Right Eye(D _v)	Left Eye(D _v)
25/02/2023	45 th Day	6/12	6/9

60th Day:

Date	Treatment Progress	Right Eye(D _v)	Left Eye(D _v)
13/03/2023	60 th day	6/9	6/9

Patient got maximum relief and his distant vision improved a lot. He can see blackboard and distant objects far better than before. Symptoms in Right eye reduced more comparison with that of left eye.

DISCUSSION

Myopia is a refractive disease of the eye having high prevalence. Incidence of this disorder is increasing due to hormonal imbalance, use of electronic gadgets and lifestyle modifications, lesser outdoor activity, lack of nutrition, lack of balanced diet. As per Ayurveda, Timira due to Prathama patalagata doshadushti of rasa and rakta dhatu⁹. This is due to improper food habits. As per Acharya Nimi if Timira is not treated in time the vitiated dosha can't allow the medicines internally and unable to penetrate. Patient may go to blindness¹⁰. There is need of effective medicine for this disorder.

RESULTS

Chakshyusa and kaphavatahara drugs are best for Timira. This provides strength to netra and improve its function. The strength to ciliary muscle produce relax of the eye. Anjana is KaphaVatahara and Go ghrita is Chakshuyusa. Goat milk¹¹ is rich in vitamin A. Anjana and oral intake of ghrita for eye disorders is already proved extremely beneficial. This combination is excellent in improvement of vision.

CONCLUSION

This is an excellent formulation for myopic patients and helps to prevent the disease. Patient is not going to develop blindness easily. Patient develops good sleep, good physical strength due to Ghee. Further studies on Myopia have to be done on larger group of patients and to document the excellent efficacy of Pathyadi varti anjana and Mahatriphala ghrita to be consumed orally.



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