A Single Case Study: Effect Of Chandana Ghrita Aschyotana In Case Of Prathma Patalgata Timira W.S.R. To Simple Myopia

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KEYWORDS

Prathma Patalgata Timira, simple myopia, Aschyotana, Kriyakalpa, chandanadi Ghrita, etc.

ABSTRACT

Aschyotana is one among the kriyakalpa procedure in which, the medicated drugs are administered in the eye and is indicated specially for the treatment of Netra Rogas. Chandana Ghrita contains Chandana, Goghrita, Godugdha. All these drugs are having Chakshushya and Rasayana properties. Chandana Ghrita is preapared in GMP certified lab in pune, as per classical references and with all precautions. Chandana Ghrita is Madhura- Tikta rasa, Madhura vipaka, laghu, ruksha and snigdha guna. It is useful in strengthening of the function of eyes, reduces the symptoms related to the disease. A single case study was taken up to access its effects in Timira w.s.r. simple myopia.

INTRODUCTION-

Myopia is that dioptric condition of the eye in which, incident parallel rays come to a focus anterior to the light sensitive part of the retina, when accommodation is at rest. Due to this the distant objects seems to blurry and near objects appear normal.

The overall crude prevalence of myopia over last four decade is 7.5% in 5-15 year age group. The prevalence of myopia is 8.5% in urban and 6.1% in rural children, with highest prevalence in urban 11-15- year age group A significant increment in prevalence is noted in the last decade in rural children from 4.6% to 6.8%, reflecting changing rural environment .India is the second most populated country in the world with 41% of the population (492 million) under 18 years of age. While numerous studies have shown an increasing prevalence of myopia worldwide, there continues to be uncertainty about the magnitude of myopia in Indian school going population.

There were four population based studies estimated that the prevalence of myopia is 27.7% and hyperopia is 22.9% in India, which increases in school going age and young adults. Globally it is estimated that approximately 1.3 billion people live with some form of vision impairment..Due to significance of myopia as a global public health concern ,it was chosen as a priority for vision 2020, by WHO to treat and avoid blindness by year 2020.

As per Guytons physiology the pathophysiology ¹of this disease is, when the cilliary muscle is completely relaxed, the light rays coming from distant objects are focused in front of the retina. This is usually due to too long eyeball, but it can result from too much refractive power in the lens system of the eye. No mechanism exists by which the eye can decrease the strength of its lens to less than that which exists when the ciliary muscle is completely relaxed. Cause of this disorder of eye is mainly said as the combination of genetic and environmental factors. Also there seems to be some link with myopia and socio economic factors. Higher levels of education, better housing, higher individual monthly income, white collar or professional occupation parents, children seem to inherit myopia. Also activities such as reading, writing, computer activities, playing video games have suggested responsible for myopia. Lack of outdoor activities also is one of the major cause.

Symptoms of this disease includes blurred vision, distorted vision, eye strain, fatigue when performing near work like studying or driving, headache usually in the evening due to straining and squinting eyes when trying to read far away objects. Refractive power can be neutralized by placing in front of the eye a concave spherical lens in form of spectacles or contact lens, which diverge the rays.



In Ayurveda it is correlated to *Timira* the word *Timira* indicates the darkness. Conditions with gradual loss of vision leading to blindness are considered as *Timira*. As per *Acharya Sushrata Timira*, *Kacha* and *Linganasha* are three stages of the same disease and in the last stage of these will be complete blindness. *Timira* too is explained in stages, where in the *Doshas* vitiate the *patalas* or layers of eyes which are situated one behind the other. When the first *Patala* i.e. outer most *Patala* is affected. It is mild in nature and gradually inner *Patalas* when gets affected can lead to disorders of serious nature to eyes.

Prathama patalgata timira, is when the vitiated doshas, move or gets sthansanshrya towards eyes, first reach the Prathama patala of the eye. The patient will have blurred vision. This is explained as Avyakta darshana by Acharya Sushruta, Animittha Avyakta roop darshana by Acharya Vagbhatta and kadachith roop darshana by Acharya Madhava, if untreated will encroach the second patala. Treatment of this includes Ghurtapana, Aschyotana, Virechana, Basti Karma, Kriyakalpa like Anjana, siravyedha etc. In this study Aschyotana with Chandana ghrita is taken up.

MATERIAL AND METHODS-

Chandana Ghrita contains -Vetta Chandana, Goghrita, Godugdha. Chandana Ghrita is preapared in GMP certified Ayush Ayurveda lab in pune, as per classical references given in Raj Nighantu and Nighantu Ratnakara with all precautions.

METHODS-

Medicine	Chandana Ghrita
Administration	Chandana Ghrita Aschyotana for 30 days in
	each eye in the morning.
Duration	4 weeks (1 month)
Follow up	8 th week (2 month)
Total treatment duration	2 months

Preparation of Chandana Ghrita- Contents-

Vetta Chandana kalka	1 part
Goghrita	8 parts
Godugdha	32 parts

Table 2- Organoleptic characters and Analytical Report of Siddha Ghrita

Test	Results
Appearance	Yellowish coloured oily liquid
Colour	Yellowish
Odour	Sweetish, aromatic
Sp. Gravity	0.936
Saponification value	196
Iodine value	32
Refractive index	1.443

CASE STUDY-HISTORY OF PATIENT-

A Female patient of age 30 yrs had the main complaint of difficulty in reading far off objects since 2 yrs. Table 3 gives details on complaints and associated complaints of the patient. The onset was gradual over 2 years. She had difficulty in watching the power point presentations from distance and then gradually even from the mid distance from the front. She used to develop watering of eyes whenever she worked continously on computer screen and mobile phones. Whenever she watched movies specially with subtitles she used to end up in severe headache and excessive tiredness of eyes which used to reduce on keeping cold packs on eyes . she observed that these symptoms gradually



increased and she usually did not prefer to work after 5 pm as she observed fatigue. Hence a father of her lady advised to get her eyes checked from doctor and then it observed that she had myopia. As she did not want to wearing spectacles so she approched to me for help.

Table 3- Details of Complaints

Chief complaints/	Onset of Symptoms	Right	Left eye	Duration
Associated Symptoms		eye		
Diminished of vision	Gradual	+	+	2 years
Tiredness	Gradual	+	+	1 year
Watering of eyes	Gradual	+	+	1 year
Headache on- off	Gradual	+	+	1 year

FAMILY HISTORY-

Both parents and siblings are known to be using correction lens for Myopia.

PERSONAL HISTORY-

She was a non-vegetarian. Bowel was well formed and normal colour and consistency. she got a sound sleep in fact had increased due to fatigue. Micturation was normal. She had a good appetite and got hunger time to time.

PHYSICAL EXAMINATION-

Physical examination showed all the parameters in normal limits. As per *Ayurveda Ashtavidha Pareeksha* is given in the Table 4.

Table 4- Ashtavidha Pareeksha

Nadi	70/min
Mootram	Prakruta
Mala	Prakruta
Jihwa	Anupalipta
Shabadam	Prakruta
Sparsha	Prakruta
Drik	Dosha in drushti
Aakruti	Prakruta

EXAMINATION OF EYES- (NETRA- PARIKSHANA):- Table.5-

❖ MANDALAS-

MANDALAS		RE	LE
PAKSHMA (EYE LASHES)		Prakruta	Prakruta
VARTMA (EYE	LID)	Prakruta	Prakruta
SHUKLA	CONJUNCTIVA	Mild congestion	Mild congestion
	SCLERA	Prakruta	Prakruta
KRUSHNA (CORNEA)		Prakruta	Prakruta
TARAKAMANDAL (IRIS)		Prakruta	Prakruta
PURVAVESHMA(ANT.CHAMBER)		Prakruta	Prakruta
DRUSHTIMANDAL (PUPIL)		Reacting to light	Reacting to light

❖ SANDHI-

SANDHI	RE	LE
PAKSHMA-VARTMA (LID MARGIN)	Prakruta	Prakruta
VARTMA-SHUKLA (FORNIX)	Watering+	Watering+
SHUKLA- KRUSHNA (LIMBUS)	Prakruta	Prakruta



KRUSHNA-DRUSHTI (PUPIL)	Photophobia	Photophobia
KANINIKA (INNER CANTHUS)	Prakruta	Prakruta
APANGA (OUTER CANTHUS)	Prakruta	Prakruta

* PATALA-

PATALA		RE	LE
BAHYA	URDVAVARTMAPATALA	Prakruta	Prakruta
PATALA	ADHARVARTMAPATALA	Prakruta	Prakruta
PRATHAMA PA	TALA	Avyakta darshana	Avyakta darshana
(TEJOJALASHRITA PATALA)			
DVITIYA PATALA		Prakruta	Prakruta
(MANSASHRITA PATALA)			
TRITIYA PATALA		Prakruta	Prakruta
(MEDASHRITA PATALA)			
CHATURTHA PATALA		Prakruta	Prakruta
(ASTHIMAJJASHRIT PATALA)			

FUNDOSCOPIC FINDINGS-

- MEDIA- Clear
- OPTIC DISC- Physiological cupping present
- COLOUR- Pale
- C.D. RATIO- Normal, Myopic crescent present
- BLOOD VESSELS- Normal
- MACULAR F.R.- Clear

Functional examination of eye was done using snelln's chart and Auto refractor.

Table 6- Vision test 1- Before treatment

Date	Treatment Progress (Day)	Right eye (D.V.)	Left eye (D.V.)
11/5/24	Before Treatment	6/24 Partial	6/18 Partial
	Day 0		

OBSERVATION-

Patient had felt the difference in one week of the treatment. She had felt the soothing effect on eyes. Watering of eyes was absent within one week of application. The symptom of tiredness of eyes had disappeared within a span of 15 days of application. Also patient had felt physically active and had feeling of lightness in *Urdhwajatru*. On 30th day of treatment vision test was repeated with using Snelln's chart and Autorefractor. Observations are given in table 7.

Table 7- Vision Test 2- After Treatment

Date	Treatment Progress (Day)	Right eye (D.V.)	Left eye (D.V.)
11/6/24	During treatment Day 30	6/12	6/9 partial
11/7/24	Follow up on 8 th week	6/9(p)	6/9



FIGURES-



Figure 1- All the contents are mixed

Figure 2- During the Paka



Figure 3- Siddha Chandana Ghrita

Figure 4- Packed sterile container



Figure 5- Packed Chandana Ghrita in Aschyotana Bottle

RESULTS -

Ayurveda says that the cause for the *Prathama Patalgata Timira* is due to vitiation in the *Rasa and Rakta Dhatu* by the doshas which has vitiated due to improper food habits. As per *Acharya Nimi* the cause for the *Timira* is get gradually increases then there will be gradual growth of doshas, it is painless and hence it get neglected (*Upekshitha*). Hence there will be further accumulation of *doshas*. These doshas get stable in that area and later on will not allow even the medicines to penetrate through. At last it can end up in the blindness. Therefore there is need for effective medicine for this disorder. People in this world are too busy they cant afford long treatment procedures. So *Aschyotana* with a *Chandana Ghrita* having classical reference is the effective medicine for Myopia.

Chandana Ghrita having Chandana, Goghrita and Godugdha. All these drugs are having Chakshushya and Rasayana properties. They provide strength and improve the functions of eyes. The eye muscles gain strength and nourishment through the drug Chandana Ghrita.



CONCLUSION-

- 1. Aschyotana is a very simple and cost effective kriyakalpa procedure.
- 2. The study concludes that *Chandana Ghrita Aschyotana* is effective in the management of Simple Myopia. watering, headache ,eye strain are also reduced.
- 3. Vision is reduced from 6/24 and 6/18 to 6/9, it seems like miracle, think over it.
- 4. Further studies with larger group of patients and on different severity of myopia has to be done to prove and document the efficacy of *Chandana Ghrita*.

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