



**A CLINICAL STUDY ON SAPTAMRITA LAUHA AND AMALAKI RASAYAN ALONG WITH JIVANTYADI GHRIT IN TIMIRA WITH SPECIAL REFERENCE TO MYOPIA**

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**ABSTRACT**

Myopia is one of the most prevalent disorders of eye. It generally classified into two groups: non-pathologic and pathologic myopia. Non pathological myopia is also commonly referred to as physiological, simple or school myopia, which is the most common refractive error of the eye and it has become more prevalent in recent years. Myopia may be considered under the broad heading of Timir in Ayurveda. As per the available literature, simple myopia may be considered as pratham patalgat Timir, which is a curable one. kriyakalpa procedure like Tarpan, Putapaak, and Nasya etc. has been proved to be effective in myopia, through various studies. These therapies are time consuming procedure, so difficult for both parents and students. To avoid absentee in school, this alternative way of internal medication are tried in the present study. In this study 41 cases of simple myopia attending the OPD of Shalakya Tantra department in Sri Baba Mastnath College Rohtak, were registered to evaluate the effect of Saptamrit lauha and Amalaki rasayan along with Jivantyadi ghrith. This combination is a very good substitute for the therapy like nasya and tarpan. Out of 41 patients one patient was left against medical advice. The effect was studied separately in freshly diagnosed myops (G-1) and patients wearing lens previously (G-2). The study was conducted for one and half month with a follow up period of one month. Proper pathya was advised as described for Timir. Very encouraging result was found in both groups. In G-1 more result obtained in comparison to G-2. Through a large scale study, more confirmatory conclusion can be drawn.

**KEYWORDS:** Timir, Myopia, Jivantyadi ghrith, Pathya.

**INTRODUCTION**

Myopia, commonly referred to as shortsightedness, is the most common eye disease in the world, with substantial social, educational, and economic impact. In India, the prevalence of myopia in the general population has been reported to be 6.9%. Genetic factors can work in various biochemical ways to cause myopia; a weak or degraded sclera and cornea are significant factors in causing myopia. One recent study suggested that students exposed to extensive 'near work' may be at a higher risk of developing myopia. Stress has been postulated as a factor in the development of myopia. Nutritive factors also play a vital role in the manifestation of myopia.<sup>[1]</sup>

Although myopia is usually not a devastating eye disease, it can rarely cause blindness through retinal degeneration, tears, and detachments. Billions of dollars are spent each year to get surgical relief from this condition, not to mention eyeglass and contact lens expenditure. Surgical intervention, although popular, is not successful for everyone and complications such as dry eyes and night glare can be very annoying.<sup>[2]</sup>

Although modern medical science has made tremendous and remarkable progress and advance in the field of ophthalmology in recent times, the importance of Ayurvedic treatment in the diseases of eyes cannot be ignored owing to the above-mentioned pitfalls of modern therapy.

In Ayurveda, the clinical features related to visual disturbances have been described under *Drishtigata Rogas*. Hence, all cases of visual disturbances can be correlated under the broad heading of the *Timira – Kacha – Linganasha* complex. A part of the clinical features of *Timira* (first and second *Patalagat*) can be correlated with the most important refractive error, which is, myopia. In the Ayurvedic classics many therapeutic procedures like tarpan, putpaak, anjan and nasya etc has been advocated for timir, also we find the concept of *Chakshushya* (good for vision) through various daily routines described under swasthavritt. Many drugs has been advised for vision problem along with specific diet which are said to improve or enhance visual acuity as well as prevent from eye diseases. As myopia mostly started in school going period, in the competitive era of study, busy life cycle of parents it is a

difficult task to provide time for therapy like Nasya, Tarpan etc.

Out of several formulations available in the market the combinations of saptamrit lauha and amlaki rasayan along with jivantyadi ghee found to be having good response in daily OPD practice so this pilot study has been conducted.

### AIMS AND OBJECTIVES

To review the etiopathogenesis of *Timira* in Ayurveda as well as in modern literature and to establish a correlation between timir and myopia.

To evaluate the efficacy of Saptamrit lauha+Amalaki rasayan along with Jivantyadi ghrith on fresh and old myopes.

To compare the efficacy between the two groups mentioned above.

### MATERIALS AND METHODS

An open randomized clinical trial was conducted on 41 patients fulfilling the criteria for the diagnosis of the disease *Timira* — myopia. The patients were selected from the O.P.D. of the Department of Shalakya of Sri baba mastnath Ayurved college, Rohtak. Patients having myopia diagnosed for the first time and who were not wearing spectacles previously had been considered as fresh myopes placed in Group-1 and patients wearing lens previously are placed in G-2. Total 15 patients registered in G-1 and 26 patients registered in G-2.

#### Inclusion criteria

1. The patients having signs and symptoms of *Timira* (1st and 2<sup>nd</sup> patal)— myopia described as per Ayurveda and modern point of view are included for this study.
2. Patients were incorporated randomly irrespective of age, sex, religion, occupation etc.

#### Exclusion criteria

1. Patients having power more than -6 D (pathological myopia)
2. Patients having any other known ocular pathology, for example, cataract, corneal opacity, h/o iridocyclitis, retinal disease, and so on were excluded from the study.

#### Investigation

The subjective examination of retinal function was tested by testing visual acuity by Snellens test type in the OPD

#### Assessment criteria

##### In G-1

Patients were tested through Snellens chart and perfect corrected number was noted but lens never prescribed and retested after every two week till come to normal vision.

##### In G-2

After one week treatment patients are advised for under corrected spect of 0.5D and retested after every two week till 6/6 achieved by the under corrected lens and again advised the same process. The time taken for achievement of normal vision by under corrected lens was noted.

### MATERIAL AND METHOD

The disease timir has been described as a main disease due to affliction of four internal patalas of eye.<sup>[3]</sup> The term patala has been mentioned for specific tunics of eye such as pratham patala for cornea of eye, dwitiya patala for sclera of eye, tritiya patala for retina of eye and fourth patala for cortical part of lens.<sup>[4]</sup> due to affliction of doshas in first patala blurring of vision occur which can be correlated with simple myopia. Due to affliction of doshas in second patala mre blurring occur. So it may be compared with pathological myopia which usually occur as a result of elongation of sclera. Ist patalgat timir has been told as saadhya (curable) and second patalgat timir as kricchrasaadhya means difficult to treat.<sup>[5]</sup>

#### Drugs

It is a very common and effective medicine readily used for eye diseases. Its ingredients are Terminalia chebula (Haritaki), Terminalia bellerica (Baheda), Embelica officinalis (Amla), Glycyrrhiza glabra (Mulheti) and Lauh Bhasma (Purified iron powder) in equal quantity.

#### Dosage

Before 6 yrs-1 tab or 500 mg with honey and ghee, twice daily.

6-12 yrs--2 tabs or 1 gm with ghee and honey, twice a day.

After 12 yrs - 3 tabs or 1.5 gm. With ghee and honey, twice a day.

#### Amalaki rasayan

The main ingredient is Amla (Embelica officinalis) processed in amalaki juice mentioned in Rastantrasar and Siddha prayog sangraha. It has rich anti-oxidant properties and aid in combating free radicals. It is one of the most powerful rejuvenating herbs used by mankind since ages.

DOSES- Same as saptamrita lauha.

#### Jivantyadi ghrith

The ingredients are-

Jivanti, ksira, ghrita, prapaundarika, kakoli, pippali, lodhra, saindhava, saunf, madhuka, draksha, sita, daruharidra, baheda, amla

#### Dose and duration

upto 6 yrs-5 ml /day during night with milk from 6-12 yrs-10ml /day during night with milk 12-25 yrs-1 5ml /day during night with milk.

### Pathya for timir

Some specific vegetables and diet has been described to prevent the disease timir, along with prevention these drugs are also described to act upon timir. Those are: vegetables like parval, karela(bitter gourd), kakdi, vaaartaku(bringle), drum stick etc. Leafy vegetables like Jivanti, chaulai, sunnishanak, bastuka(bathua), bara bastuka has been describes to prevent timir. It has been advised to take barley processed with cow ghee, shatavari processed with cow ghee, mungdaal processed with cow ghee etc are very much beneficial or eyes.<sup>[6]</sup>

### OBSERVATIONS

The general observations of all 41 patients are described as follows:

Out of the 41 patients registered in the present study, 40 completed the treatment, while only 1 patient did not complete it. Among them, 15 patients were in G-1(fresh myopes) and 26 patient in G-2 myops wearing spect).

A majority of the patients (50%) were reported in the age group of 10 – 15 years followed by 30% in the age group of 16 – 20 and remaining 20% in the age group of 21 – 25 years each.

A positive family history was found in 29.26% of the patients.

All the patients in G-1 were having blurring of vision as major complain. Out of 15 patients 2 patients were having complained of headache during evening.

In G-2 20% patient was having complain of recurrent changes of number in every 4-6 month.

In group-1, 40% patients were reported to have a visual acuity of 6/9 to 6/18 and diapteric power from -0.5D to -1.00D, 40% patients were reported to have a visual acuity of 6 / 18 to 6/36 having diapteric power from -1 to -1.5D and 20% patients were reported to have a visual acuity of 6 / 36 to 6/60D or less having diapteric power from -1.5 to -2.5 D.

In G-2-Out of 25 patients 15 patients (57.70%) were having power -0.5 to-2.5D, 7 patients (26.92%) were having power -2.5 to-4.5D, 4 patients (15.38%) were having power -4.5 to-6D.

### RESULTS

In group -1, -0.5 D to -1.00D correction found after 2 weeks treatment in 40% cases, -1D to -1.5 D correction found after 4wks in next 26.64% cases, -1.5D to -2.00D correcton observed after 6 wk treatment in 26.64% cases and no any changes observed in 6.66% cases after 6 wks treatment(Table-1).

In group -2, -0.5 D to -1.00D correction found after 2 weeks treatment in 28% cases, -1D to -1.5 D correction found after 4wks in next 24% cases, -1.5D to -2.00D correcton observed after 6 wk treatment in 24% cases and no any changes observed in 24% cases after 6 wks treatment(Table-2).

**Table 1: Correction in Diapter in G-1 during the treatment.**

Time period	-0.5D to -1.00D correction		Average-0.1 to-1.5D correction		Average-1.5 to-2.00D correction		No change
	No. of pts (out of 15)	% of pts	No. of pts (out of 14)	% of pts	No. of pts (out of 11)	% of pts	
2WK	06	40					
4WK			04	26.66			
6WK	-	-	-	-	04	26.66	1(6.66%)

**Table 2: Correction in G-2 during the treatment.**

Time period	Average-0.5 to-1.00D correction		Average-1.00 to-1.5D correction		Average-1.5 to-2.00D correction		No change
	No. of pts (out of 10)	% of pts	No. of pts (out of 4)	% of pts	No. of pts (out of 2)	% of pts	
2WK	07	28					
4WK			06	24			
6WK					06	24	6(24%)

### DISCUSSION

The symptom of ist patalgat Timir i.e avykta rupa darshana(blurring of vision) is the cardinal feature of low degree myopia. In second patalgat Timir bhrusam vihwala(more blurring) of dristi occur which is found in case of high myopia.

### General observations

A maximum number of the patients were from the school-going age group and had a habit of playing games

in mobile or computer, watching TV, working on computers for a long time which are the etiology of eye disease i.e. sukshma nirikshna and seeing bright objects as described in Ayurveda also supports the theory which states that excessive use of accommodation will lead to the development of myopia. In the present study, it is a significant observation that the disease manifests in teenagers. It is also a proven fact that simple myopia usually begins in childhood. In all, 29.26% of the patients had a positive family history. This observation

supports the genetic theory, which states that genes are the main culprits in the development and progression of myopia. Differentiation of *Timira* on the basis of *Doshik* involvement could not be drawn as a conclusion for the patients not having specific symptoms according to *Dosha*, as mentioned in the texts, other than blurred vision.

#### Mode of actions of drugs

In saptamrit lauha the combine effect of triphala and mulethi is tridosh shamak which rectify the doshik imbalance occur within the eye due to excessive use of TV, computer etc. All the four ingredient are having chakshusya pooperty. Iron is also having property to maintain the power of eye because it is seen that after excessive blood loos gradual loss of vision occur. Amalaki rasayan is a very potent rasayan having rejuvenating power may help to reshape the changes occur in the eye due to excessive strain of muscle, it is also having chakshusya property. Jivantyadi ghrith having Jivanti as rasayan and vata pitta shamak property and cow ghee a proved very effective nutrient for eye, may have action in correcting the eye power. *Ghritha* pacifies Vata due to *Sneha*, *Pitta* due to *Sheeta*. So the overall tridosh shamak and rasayana property of the drugs may break the pathogenesis of the disease *Timira*, which is *Tridoshaja* in its manifestation.

#### CONCLUSION

From the above literary study about timir it can be concluded that a controversy free scientific literature about evry types of vision related problems already present in Sushrut samhita.

The above drug combinations are a very good alternative to treat various refractive errors.

A comparative study needed to evaluate the actual efficacy of above drugs in comparison with pathya advised.

It will be better if saptamrit avaleha(saptamrit lauha along with ghee and honey) can be made available to the patients.

Further large scale study is needed to draw a confirmatory conclusion regarding this study.

Other various formulations described in the text also may be tried to find out more effective solution.

#### REFERENCES

1. <http://en.wikipedia.org/wiki/Myopia>.
2. <http://www.bmj.com/content/324/7347/0.1.full?sid=3edf92c4-bb9a-4c3c-83a4-6beb647b8239>.
3. Sushruta Samhita, Ambikadatta Shastri, Ayurved tattwa sandeepika, Chaukhamba Sanskrit Sansthan, part-2, Chapter 1/17,18.
4. Article by myself, in journal of science, volume 5, issue-4, 2015 page no-238-241.

5. Sushruta Samhita, Ambikadatta Shastri, Ayurved tattwa sandeepika, Chaukhamba Sanskrit Sansthan, part-1, Chapter 17/ 53.
6. Sushruta Samhita, Ambikadatta Shastri, Ayurved tattwa sandeepika, Chaukhamba Sanskrit Sansthan, part-2, Chapter 17/48-51.