

Role of Bhaskaradi Ghrita Tarpana in Management of Timira w.s.r. to (Simple Myopia)

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Abstract

Prathamapatalagata Timira is one among the stages of Timira described under Drishtigata Rogashaving the chief symptom of avyaktadarshana. It can be correlated with Simple Myopia or short sightedness which is a variety of refractive error producing blurred vision for distance and may or may not be associated with asthenopic symptoms. If appropriate treatment is not done in this stage it progresses further and may lead to blindness. In modern ophthalmology it is managed with the use of refractive aids and surgeries for improving the quality of vision with limited scope in curtailing the progression of the disease. In this regard this study is been taken up to evaluate the effect of Tarpana with Bhaskaradi Ghrita once a day for 5 days followed by a gap of 7 days after the procedure. Later tarpana was resumed for another 5 days. Similarly this procedure was repeated for 3rd and 4th sittings with total period of 48 days. Pre and post treatment assessment of the patient was carried out with the subjective parameters like avyaktadarshana, headache, eyestrain, watering of eyes and objective parameter like Visual Acuity with Snellen's Chart. These were suitably graded to assess the results that were statistically analyzed and it showed significant results.

Keywords: Avyaktadarshana; Bhaskaradi Ghrita; Simple Myopia; Tarpana; Timira.

Introduction

Timira is one among the Drishtigata Roga [1], characterized by blurred vision initially. It can be correlated with one of the refractive error – simple myopia. Refractive errors has 70 to 90% prevalence rate in Asia and among those Simple Myopia alone accounts for 20 to 40% [2], Untreated refractive errors are the 4th cause of irreversible visual loss. Simple myopia can be corrected by refractive aids and refractive surgeries with limited scope to stop the progression of the condition. Tarpana a vishishthanetrachikitsa mentioned under the kriyakalpahasa wide application in treatment of Timira. Bhaskaradighrita is one among the various formulation used for Timira in the form of Tarpana in the classics.

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Aim & Objectives

To evaluate the efficacy of Bhaskaradi Ghrita Tarpana in the management of Timira (Simple Myopia)

Review of Literature

Timira: It is considered as initial stage of many other Drishtigata Roga. If not attended efficiently in time may leads to complete visual loss if progressed to further stages.

This disease is explained in 4 stages viz. – Prathama Patalagata Timira & Dwiteeya Patalagata Timira, kacha and linganasha. The signs and symptoms are explained as per the Patala involved.

In Prathama and Dwiteeya Patala, the signs and symptoms are in progressive stage as per the doshik involvement. When Dosha enters into Triteeya Patalagata then it is considered as Kacha and last Patalaits termed as Linganashawhich presents with complete loss of vision [3].

Refractive Errors: It is a state of Refraction, when the parallel rays of light coming from infinity (with accommodation at rest), are focused either in front or behind the sensitive layer of retina, in one or both the meridians. There are 3 refractive errors viz. – Myopia, Hypermetropia & Astigmatism.

Myopia: Myopia / short sightedness – Parallel rays of light coming from infinite are focused in front of the retina when accommodation is at rest. It has 4 clinical varieties – viz. Congenital, Simple / Developmental, Pathological / Degenerative & Acquired. Simple Myopia is considered as a physiological error not associated with any disease of the eye. Many theories have been put forward for the exact pathology of refractive errors but still the phenomenon is obscured [4],

Management: Management of Refractive errors begins with prescription of spectacles / contact lens of appropriate power and nutritive supplements. Moreover trend of various surgical and laser intervention has come in practice since last 30 years. Number of therapies and internal medications are explained for the management of Timira in classics. Among them Bhaskaraadi Ghrita [5], was selected in the form of Tarpana.

Methodology

Fifteen subjects with the symptoms of blurred distant vision associated with or without asthenopic symptoms like eye strain, headache and watering from eyes irrespective of sex, religion and occupation etc were selected for the study. During the course of intervention the patients were advised not to use present power glasses or contact lenses.

Inclusion Criteria [6]

1. Patients under the age group of 8 to 25yrs.
2. Patients presenting with clinically established diagnosis of simple myopia
3. Optical correction ranging from -0.50 D to -5.00 D (Spherical lens)

Exclusion Criteria

1. Pathological myopia, High myopia with degenerative and retinal changes, cataract, associated with endocrinal and mal-nutritional disorders.

2. Patients suffering from any of the systemic disorders (Hypertension, Diabetes, Tuberculosis, Syphilis)
3. Patient who underwent any of the refractive surgeries.

Intervention

Patients were subjected to Tarpana with Bhaskaraadi Ghrita daily once for 5 days for 4 sittings with the gap of 7 days in between the therapy. (48 Days intervention Period) and its effects were assessed before and after the treatment.

Assessment Parameters

Subjective parameters

- Avyaktha Darshana,
 - Headache,
 - Eye strain
 - Watering of eyes
- Assessment Gradings were given as shown in Table 1.

Objective Parameters

- Visual acuity (Snellen's Chart) without aid
- Assessment Gradings were given as shown in Table 2.

Table 1: Assessment Gradings for subjective Parameters

Avyakta Darshana (Blurred Vision)	
0	No blurred vision
1	Occasionally blurred vision
2	Intermittent blurred vision adjustable with squeezing of eyes
3	Always blurred vision depends on spectacles
Headache, Eyestrain & Watering of eyes	
0	Nil
1	Occasionally
2	Intermittent
3	Continuous

Table 2: Assessment gradings for Objective Parameter

Grade	Snellen's chart reading
0	6/6
1	6/9
2	6/12
3	6/18
4	6/24
5	6/36
6	6/60 to 4/60
7	3/60 and less

Observation & Results

Observations

The detailed demographic data, data related to disease, aetiological factors and Before treatment (BT) observations were collected on Day 01 after obtaining the informed written consent. After treatment (AT) observations were collected after completion of 48 days intervention i.e. on 49th Day.

Results

Showed in Table no 3 and Chart No 1 and 2.

Discussion

Timira is a symptom which is associated with the blurred vision due to any reason. The present study was confined with the same due to Simple myopia. Other variety of Timira and Doshik involvement represents various other clinical conditions. The exact pathology of Refractive errors is still obscure. Hence, patho-physiological consequences and accordingly management remains logical.

Mode of Action of Tarpana

Tarpana: According to Acharya Charaka, Timira is Vata Nanatmajaa Vyadhi, so mainly Vata

Table 3: BT and AT Statistical data Analysis

Parameter	Average BT	Average AT	Differ (d)	% of differ % d	SD	SE	df	T value	P value	Remarks
Avyakta Darshana	2.60	2.26	0.33	12.69	0.48	0.12	14	2.64	<0.01	S
Eyestrain	1.2	0.13	1.06	88.33	0.88	0.22	14	4.67	<0.001	HS
Watering of eyes	0.46	0.2	0.26	78.78	0.45	0.11	14	2.25	<0.05	S
Headache	0.8	0.06	0.73	91.25	0.96	0.24	14	2.95	<0.01	S
Vn RE	4.7	4.0	0.73	15.4	0.59	0.15	14	4.78	<0.001	HS
Vn LE	4.8	3.9	0.86	17.9	0.74	0.19	14	4.51	<0.001	HS

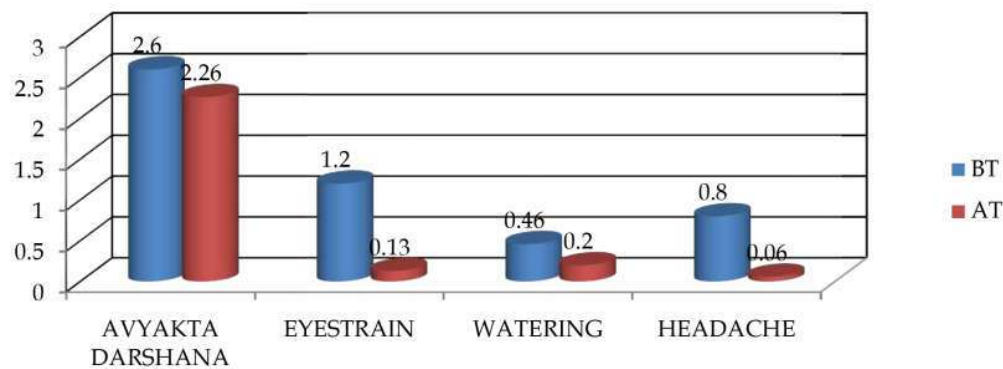


Chart 1: BT and at results of tarpana on subjective parameters

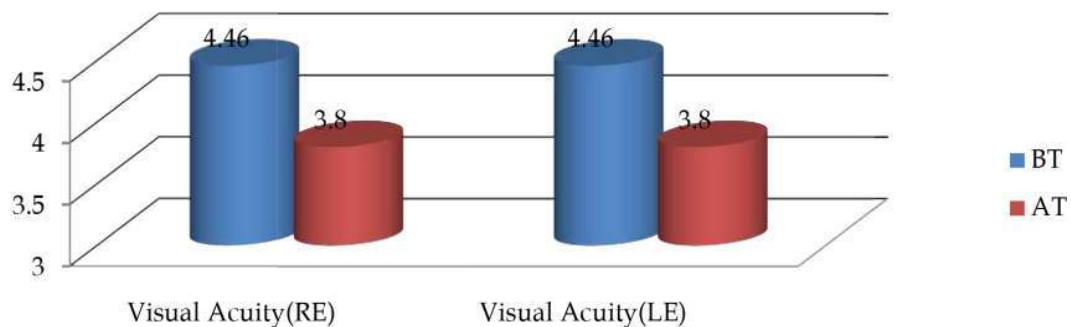


Chart 2: BT and at results of tarpana on objective parameter

predominant causative factors are responsible for Timira. When aggravated Vata Dosha is situated in Indriyasthanam i.e. eye then it will affect the normal function of the Chakshurindriya i.e. Timira. Acharya also said that Avyaktavastha is prodromal sign of NanatmajaVyadhi [7]. It means that there is no specific purvarupa for this disease. The only clinical feature of first PatalaTimira pathology is indistinct vision, which becomes clear sometimes without any reason. In Ayurvedic classics various therapeutic procedures are explained which are said to improve or enhance the visual acuity as well as improve the health of the eye. Kriyakalpa is one such group of special methods of drug administration locally into the eyes for the treatment for eye diseases, in which Tarpana [8], is foremost procedure for Timira. Tarpana provides Vatashamaka effect and nourishment to the eyes. Hence, Tarpana is an efficient therapy in maintaining the wellbeing of all ocular structures by providing nourishment and improving functional ability. Thus, might be helping in improving vision.

Probable mode of action of bhaskaradi ghrita

Bhaskaradighrita explained by Acharya Vangasena in netra rogadhikara indicated mainly in timira and more specifically mentioned as manda drishti consists of Pippali, Draksha, Sharkara, Yashtimadhu and Ghrita. It has predominance of madhura rasa, snigdha guna, madhuravipaka, sheetaveerya and vatashamaka property which helps to counteract the vatapradhanatridosha vitiation in Timira. Draksha, Yashtimadhu, Sharkara acts as Sthanika Pitta Shamana and Pippali removes the Avarana of Dosha and improves the function of Sthanika Alochaka Pitta.

Draksha [9], and Yashtimadhu [10], has madhura rasa, guru, snigdha guna and madhuravipaka which makes them a potent drug in controlling vitiated vatadosha. Its sheeta guna along with madhura rasa controls pitta dosha. Jeevaniya and Rasayana properties maintain the integrity of ocular structures and help in rejuvenation of tissues. It has been termed as chakshushya. Yashtimadhu contains *flavonoids* [11]. Flavonoids act as anti-oxidant and scavenge the oxygen free radicals which cause harm to cells of the eyes. It also contains a terpenoid glycyrrhizin which has a strong anti-spasmodic action, may act on the ciliary muscles inhibiting the progression of myopia.

Pippali [12]: By virtue of itsteekshna and pramathiguna helps in srotoshodhana, opens the minute channels and further helps in easy penetration of other drugs. Pippali has the property

like *bioavailability enhancer and bio enhancer* [13]. Hence may help in easy penetration of the lipophilic and hydrophilic cornea.

Ghrita [14] is effective in subsiding Pittaja and Vataja disorders, it improves Dhatus and is overall booster for improving Ojas. Bhavaprakasha has also described Ghrita as Rasayana, chakshushya and protects body from various diseases. Charaka has quoted as snehoanilamhanti, i.e. in order to pacify the vata dosha snehana is the best. He also mentioned Akshi Tarpana as one of the 24 Snehapravicharana [15]. So in order to pacify the vata dosha in Timira, Tarpana with the ghrita will be the beneficial.

Conclusion

Timira being a vata pradhana tridosha vyadhi can be managed by the tarpana kriyakalpa with Bhaskaradi Ghrita in effective manner. In this study the Bhaskaradi ghrita Tarpana has shown subjectively appreciable and statistically significant results.

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