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Case Study

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AYURVEDIC MANAGEMENT OF TIMIRA W.S.R TO MYOPIA- A **CASE STUDY**

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ABSTRACT

Myopia is the most common refractive error of the eye seen in children and young adults and it has become more prevalent in recent years and is a cause of concern the world over. It is very common ophthalmic disease that entails substantial, social, personal, educational & economic impact. Myopia commonly referred to as short sightedness condition of the eye where the light that comes in does not directly focus on the retina but in front of it. [1] Some of the clinical features of timira can be correlated with myopia involving first and second patala in terms of symptoms, anatomical structure involved and the pathogenesis of the disease. Timira is counted under the Drishtigata

rogas described by Sushruta. [2] A case study was conducted to evaluate the role of ayurvedic treatment modalities in the management of timira. He was treated with Nasya, Netra tarpana followed by eye exercises along with eye drops and internal medicine. After that, the cardinal signs & symptoms of myopia that is visual acuity, was evaluated before and after the treatment. Comparatively significant improvement in the sign & symptoms and visual acuity in both the eye was found after treatment. Thus, it can be concluded that ayurvedic management are helpful to treat myopia.

KEYWORDS: Myopia, Tarpana, Timira, Nasya, Saptamrita loha, Kataka phala, Triphala ghrita, Eye exercises.

INTRODUCTION

Myopia is the state of refraction in which parallel rays of light are brought to focus in front of the retina of a resting eye. Myopia is measured by the spherical power in dioptres of the diverging lens needed to focus light onto the retina, which can be expressed as the spherical

equivalent or refraction in the least myopic meridian.^[3,4] The clinical correlates of myopia include blurred distance of vision, eye rubbing, and squinting. Myopia is highly prevalent in our society, Various surveys in India have found the myopia prevalence ranging from 6.9% to 19.7%.^[5,6] Myopia progression is irreversible and there is no cure. Methods for the correction of myopia are not without complications, including corneal infections due to contact lens wear and corneal scarring and persistent corneal haze from refractive surgery.^[7] Refractive surgeries for treatment of myopia are both costly and unsuitable for children's eyes and do not change axial elongation, which is the commonest source of myopia.^[8] Hence, the Ayurvedic science can be explored to find a better alternative to manage this condition.

Myopia closely resembles with Timira involving first and second Patala in terms of symptoms, anatomical structures involved, and the pathogenesis of the disease. Shastrokta lakshanas of timira such as bhramantiva sa pashyati, avila darshan, vyaviddha darshana, aruna darshana. Though various drugs and local therapeutic procedures like Nasya, Anjana, Akshi Tarpana, etc., have been mentioned in Ayurvedic texts for the management of Timira, but Akshi-Tarpana is the foremost on account of its sound literary and practical evidences. In ayurvedic classics we find the concept of chakshusya rasayana and tridosha pacifying properties. Nasya Karma is one among the procedures of Panchakarma that is specifically desired in Urdhwajatrugata (supraclavicular) diseases. All the efforts should be made to strengthen by procedures like Nasya, Netra Tarpana and so on. The nose is the gateway of drug administration in the case of Urdhwajatrugata Rogas and Nasya is the only procedure that directly affects all the Indriyas. Tarpana is the best method of inducing 'Tripti'(satisfaction) to the eyes. [9] According to modern pharmacology various drugs used in the form of the eye drops or eye ointment, enter the eyeball by passing through the cornea. This penetration depends upon the permeability of various layers of cornea. The epithelium and endothelium are highly permeable for lipid content as compared to stromal layer. Thus, fat soluble drugs readily penetrate these layers. The triphala ghrita which is generally used for tarpana is saturated with decoction of various drugs and hence it contains both lipid and water-soluble constituents, Thus, it is lipophilic as well as hydrophilic and hence it has got very good penetration through various layers of the cornea. In Tarpana, Triphala ghrita is one among the best chakshushya drugs, ghrita have rasayana and tridosha pacifying action similarly ayurvedic drugs like Saptamrita loha, Katakaphala eyedrops and regular eye exercises had been advised, keeping these views into consideration present case study was planned.

CASE STUDY

A fully conscious oriented male aged 17 years has visited Shalakya tantra OPD, SJIIM, Bengaluru, with chief complaints of blurring of vision for distant objects in both eyes, eye strain from the past 6 months

Family history – No significant family history was found.

Personal history - The patient is vegetarian, having normal appetite, bowel history regular, normal micturition and sound sleep.

Ashtavidha pareeksha

- 1 Nadi- 70/min
- 2 Mutra -Samyak
- 3 Mala -Samyak
- 4 Jihwa- Nirama
- 5 Shabda -Prakruta
- 6 Sparsha- Sheetoshna
- 7 druk -Vikruta
- 8 Akruti- Madhyama

Eye examination: By Torchlight and Slit lamp we found

Eye Part	OD	OS
Lids, Lashes	Normal	Normal
Conjunctiva	Normal	Normal
Cornea	Normal	Normal
Pupil	Normal/Reactive	Normal/Reactive
Anterior Chamber	Normal	Normal
Lens	No significant changes	No significant changes

VISUAL ACUITY BEFORE TREATMENT

	DISTANT VISION	NEAR VISION
Bilateral Eye	5/24	N6
Right Eye	5/24	N6
Left Eye	5/24	N6

TREATMENT ADOPTED

SL.NO	PROCEDURE	DRUGS	DOSAGE	DURATION
1	Nasya	Anu taila	8 drops in each nostril	First 7 days in the
			in empty stomach	morning
2	Netra tarpana	Triphala Ghrita	Quantity suffficient	7 days after nasya
2	Aschyotana	Katakaphala	1-1 drop to each eye	For 1 month
3	(Eye drops)	drops	twice a day	TOL I IIIOIIIII

1	Internal	Tab. Saptamrita	2 tabs OD with warm	Ear 1 month
4	medicine	loha	water After food	For I month

EYE EXERCISES

EXERCISE 1

Washing of Eyes: Rinse your eyes by blinking about 20 times, in a pair of eye cups filled to the brim with a weak solution of Triphala kashaya (1 cup of water, add 1/4" of Triphala powder then boil the solution later filtrate, leave it to cool and use the solution for washing of eyes) this is done once before and after the sunning exercises. Washing of eye helps in toning of the eyes and accessories

EXERCISE 2

Sunning: Sun is a wonderful source of energy which increases the vitality of eye and helps in increasing the blood circulation to the eye. Sunning is conducted by exposing the closed eye; facing the sun for 3 minutes, always swing from one side to the other, after applying Eye drops, in a sitting posture with your feet flat on the floor, back erect, hand on your knees, chin raised and eye closed, facing the sun sway your body from side for a period of 30 counts. Sunning is best and practiced during sun rise or sun set. The above procedure can be conducted using a 200 watts bulb on cloudy days.

EXERCISE 3

Palming: Sit comfortably with your eyes covered by your palms, fingers crossed, taking support on the forehead, and your elbows resting on a soft pillow, so as to avoid pressure over the eyeball. Ensure it is pitch black. Take deep breath, paying more attention to expiration. Count 50 inspiration. During palming think of something pleasant, a beautiful white rose, or listen to some pleasant music. The mind experienced as a result of palming should be devoid of anger, worries and depression. Relaxation, coolness and relief from pain can be experienced as a result of palming.

EXERCISE 4

Shifting: Moving the eyes from one point to another is called shifting. Hold the foot scale in front of your eyes at a distance of 15 inch. Fix the head in a position i.e., while starting at 6 inches mark on the scale. Then the eyes are slowly moved towards the 0 inches mark of the scale and you have to blink once. Then slowly move your gaze towards the 6 inches mark again. Blink once again and slowly move your gaze to the 12 inches mark, and blink once again.

EXERCISE 5

Candle flame: Sit facing the candle flame, about 18 inches away and move the eyes forward (up to 3 inch close to the candle) and then backwards to the starting position with the rhythm of respiration while keeping the vision towards the blue color of the flame. Count 25-30 respiration.

EXERCISE 6

Tossing the ball: Throw the ball to the ground and observe the bounce, move the sight along with the ball and blink, the moment you catch it. Repeat this 30 times, Later, toss the ball from one hand to the other, in semicircle, moving your sight along the ball and blink when you hold the ball.

EXERCISE 7

Vapour: Add 1-2 drops of Eucalyptus oil or crystals of menthol to kettle consisting a 100 ml of boiling water. Face the steam covering your head with a towel. Keep blinking for one minute. Vaporization helps to strengthen the muscles and improve blood circulation in the frontal area of the head.

EXERCISE 8

Cold pad: Wipe the eyes with a napkin. Keep well spread wet cotton pads soaked and squeezed in cold water over the eyelids.

All eye exercises are advised for 1 month after nasya and tarpana probably in the morning time.

RESULT AFTER THE TREATMENT

	DISTANT VISION	NEAR VISION
BILATERAL EYE	6/36	N6
RIGHT EYE	6/36	N6
LEFT EYE	6/36	N6

VISUAL ACUITY AFTER TREATMENT

No adverse events were reported during the study. There was a significant improvement noted in his visual acuity in both eye and eye strain was also reduced.

DISCUSSION

Just as sun is the most important celestial object so also eyes are the most important sensory organs. As it is quoted "Sarvendriyaanaam nayanam pradhaanam". All efforts should be

made by man to protect the eyes throughout life. In our classics timira is considered as tridoshaja vyadhi treated by snehana, virechana, rasayana, raktamokshana, nasya, anjana, shirobasti, tarpana, lepa, seka, that are to be followed repeatedly. Among these Nasya, Netra tarpana and internal medication followed by regular eye exercise was planned in this case. Nasya is done with Anu taila. It is tridosha shamaka, hence it destroys the pathology of Timira. Nasya is one of the important karmas of Panchakarma which is used for all diseases of the Urdhwajatru. The procedure of nasya is that it can be used for Shamana as well as for Shodhana of Doshas. It can eliminate neurological and psychological problems when used independently or with any other Karmas. As stated, Nasa hi shiraso dwaram" according to this, nasya aushadhi stimulates the Shringataka marma, brain and nervous system by going to the nostril and at the same time, the nasya is absorbed in the entire Urdhwanga and provides nutrition to the head, brain, nose, ears, eyes, mouth etc. Nasya karma of Ayurveda proves to be beneficial from the history of treatment and prevention measures given to the persons suffering from Urdhwajatrugata disease. Tarpana with Triphala ghrita is done after Nasya. Triphala ghrita is having chakshushya and rasayana properties and indicated in timira. It has high levels of antioxidants which reduces oxidative stress and minimises the damage and thinning of the cornea. The ghrita has the quality of trespassing into minute channel of the body. Hence when applied in the eye it enters deeper layer of the dhatus and cleanses every minute part of them. The lipophilic action of ghrita facilitates the transportation of the drug to the target organ and finally reaching the cells because the cell membrane also contains lipid. The Katakaphala eye drops is advised for 1 month. Katakaphala is kaphavata shamaka and is chakshushya and beneficial in netra vikaras. Saptamrita loha is classical ayurvedic herbomineral formulation. It chiefly aims at treating all sort of eye anomalies apart from the eye this medication proved as subsided associated symptom like netradaha and other rakta vyapad vyadhi.

After Nasya and Tarpana, Eye exercises was advised for 1 month which helps in improving vision, preventing dryness of eyes, reducing eye strain, enhances concentration and lower risk of getting eye diseases.

CONCLUSION

Abhyantara and Bahya chikitsa of timira has shown good improvement in visual acuity and other associated symptom like durastha avyakta darshana, netrayasa. This study shows effectiveness of Ayurveda in timira as the duration of the treatment was short hence for

reaching at any definite conclusion. Further long duration studies are needed since the study has shown interesting result. It is recommended that the study should be carried out on a large number of patients with longer duration to evaluate and analyze the results.

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