

**A CLINICAL STUDY ON AYURVEDIC MANAGEMENT OF
ASTIGMATISM****¹Dr. Hemlata Jain and ²Dr. Rohit Kumar Jain**¹Assistent Professor at Pt. K.L.S. Govt. Auto. Ayurved College, Bhopal.²Associate Professor at Sri Sai Intitute of Ayurvedic Research and Medicine, Bhopal.Article Received on
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K.L.S. Govt. Auto. Ayurved
College, Bhopal.**ABSTRACT**

Astigmatism is a common refractive error caused by a meridional asymmetry in the curvature of the eye's cornea or lens, leading to a corresponding asymmetric refraction of light rays. Astigmatism affects patients' visual acuity and contrast sensitivity at all light levels. Astigmatism correction is generally achieved using spectacles, contact lenses, toric intraocular lenses, toric implantable collamer lenses, or corneal refractive surgery. Till now there is no satisfactory treatment of astigmatism in modern science.^[1] Hence, there is an earnest need for a cost effective remedy of the disorder under discussion, which should be free from any untoward effect. Ayurveda is a 'Science of Life'. It deals with each and every aspect of human life. It's first aim is to maintain the health and happiness while the next is to manage and

restore the status of health and productive state of mind.^[2] it has a rejuvenating medicine and herbs help to neutralize effects over eyes like strengthening eye muscles, making lens material elastic, and correcting the refractive error. Eye exercise and ayurvedic treatment help supportive in correcting refractive error.^[3] The Tharpana is one of the procedure described in Ayurveda for eye diseases. It is highly powerful and rejuvenates the eyes.^[4] In this therapy, the unctuous substances i.e. medicated lipid (mostly Ghrita) is kept in the eye for a specific period surrounded by a layer of wet flour of pulse (*Phaseolus radiatus*).^[5] Symptoms of refractive errors are comparable with Timira described in Ayurveda and can be successfully alleviated by Kriyakalpa^[6] (specific ocular therapeutic procedures), coupled with some oral medication.

KEYWORDS: Refractive errors, Ayurveda, Timira, Kriyakalpa, Nasya.

INTRODUCTION

Astigmatism is a type of refractive error. It occurs when the cornea or lens is curved more steeply in one direction than in another, that causes blurred distance and near vision.^[7] Symptoms of astigmatism include blurred vision, headaches, eye strain, watering of the eyes, and sometimes squinting to obtain a clearer image. Modern treatments for astigmatism include glasses, contact lenses, and LASIK surgery.^[8] Although the exact cause of astigmatism is still not known, age, race/ethnicity, genetic factors, environment, extraocular muscle tension, visual feedback, and eyelid pressure have been found to influence the development of astigmatism.^[9]

The prevalence of astigmatism increases with age due to changes in refractive index gradients. According to an American study, nearly three in ten children (28.4%) between the ages of five and seventeen have astigmatism.^[10] According to a study published in the Indian Journal of Ophthalmology, the overall prevalence of astigmatism in India is around 30%. The prevalence is higher in rural areas (35.2%) compared to urban areas (28.8%). In terms of gender, the prevalence is slightly higher in males (30.5%) than in females (29.5%). The study also found that the prevalence of astigmatism increases with age, with the highest prevalence observed in the age group of 50-59 years (39.7%).^[11]

Astigmatism are described in Ayurveda under the terms Timira, Kacha, and Linganasha. Timira is a condition which begins with Avyakta Darshana and progresses to complete vision loss. Timira is characterized by Sushruta as Ghora Roga, which causes visual disturbances due to the accumulation of Doshas in various Patalas of the eye.^[12] Timira is a disorder of the Drusti Mandala that begins with impaired vision and progresses to full blindness if left untreated^[13] timir(Astigmatism)may result from vitiation of vata or kapha doshas, affecting the movement of light rays or the refractive media's surface irregularities. Treatment aims to correct these imbalances and restore normal refractive function. Various Ayurvedic treatments may be employed, including massage therapies like shiro abhyanga (head massage), thalam (application of oil on the head), vidalalk, seka etc. strengthen ocular muscles, nerves, and tissues. among of them one is tarpana procedure, it gives nourishment to the eyes and cures Vata/Pitta/kapha Vikara (preventive as well as curative aspects) by its application. The Ghee is kept directly over the open eyes and patient is advised to rotate the eyeballs. The medication is usually Ghee and it is held in place by a flour dough or by a special Yantra goggles. There are different Aushadha Dharana Kaal for different

conditions.^[14]

Progressive cases of astigmatism require prompt treatment to prevent worsening symptoms and potential lifelong issues.

In present study we have discussed a case of a 07 year-old male child patient who came to OPD with complains of blurred vision without spect. It is a diagnosed case and patient did not want to wear glasses.

Presenting complaints

Patient was accompanied with his father and as per the words of patient's father, the child has astigmatism and does not want to wear glasses. The child did not have any other problem, his digestion, appetite, sleep everything was normal.

History

A 07 year old male child from a middle class, father was myopic since 15 year, they brought him to the hospital.

Family history--father has had the history of myopia since 15 year.

Birth history--Full term normal labour

Lid-norml bilateral

Conjunctiva- norml bilateral

Cornea- norml bilateral

Papillary reaction- norml bilateral

Media- clear bilateral

Table 1: Visual Acuity: Before First Course of Treatment.

| | OD | OS |
|---------------------------|------|-------|
| Distant vision | 6/36 | 6/6 p |
| Distant vision With spect | 6/6 | 6/6 |
| Near vision | n.6 | n.6 |

Table 2: Auto refraction: Before Treatment.

| | OD | | OS | | |
|-------------|------------|-----|------------|----|-----|
| Distant | -1.50(cyl) | 180 | -0.75(cyl) | 10 | 6/6 |
| Near vision | n.6 | | n.6 | | |

Treatment Given (First Visit)03/02/2018

| DAYS | TREATMENT | MEDICINE |
|---------|--|------------------------------|
| 1 month | 1.abhyanga (poorvakarma) | 1.saptamrita louha 125 mg bd |
| | 2. swedan (poorvakarma) | |
| | 1.Trifala ghrita tarpan 1000 matra(10 min) alternate day | |

Table 3: Visual Acuity: After First Course of Treatment (10/03/2018).

| | OD | OS |
|---------------------------|------|-------|
| Distant vision | 6/24 | 6/6 p |
| Distant vision With spect | 6/6 | 6/6 |
| Near vision | n.6 | n.6 |

Table 4: Visual Acuity: After Second Course of Treatment(21/04/2018).

| | OD | OS |
|---------------------------|------|-----|
| Distant vision | 6/12 | 6/6 |
| Distant vision With spect | 6/6 | 6/6 |
| Near vision | n.6 | n.6 |

Table 5: Auto refraction: After Second Course of Treatmen(05/05/2018).

| | OD | | | OS | | |
|----------|------------|------------|----------|-----|---|---|
| Distance | -0.50(sph) | -0.25(cyl) | 90(Axis) | - | - | - |
| Near | n.6 | | | n.6 | | |

Treatment Given (05/05/2018)

| DAYS | TREATMENT | MEDICINE |
|---------|--|------------------------------|
| 1 month | 1.abhyanga (poorvakarma) | 2.saptamrita louha 125 mg bd |
| | 2. swedan (poorvakarma) | |
| | 1.Trifala ghrita tarpan 1000 matra(10 min) alternate day | |
| | | |
| | | |

Table 7: Visual Acuity: After Second Course of Treatmen(29/09/18).

| | OD | OS |
|----------------|-------|-----|
| Distant vision | 6/6 p | 6/6 |
| Near vision | n.6 | n.6 |

Adverse Reactions-- No adverse reactions found during the course of treatments.

RESULT

There was significant improvement in visual acuity and auto refraction of both eyes.

DISCUSSION

In Ayurveda visual defects are mentioned under Drishtigata Rogas. There are 6 patala mentioned by aacharya shushruta pratham patal is made up of tejas and jal. The word Teja means Alochaka Pitta and siragat rakta while Jala implies Rasa Dhatu. According to some scholars, the 1 st Patalas can be taken as Cornea and Aqueous humor as they are the seat of Tejas and Jala. Pitta helps in perception of objects of vision and Vata is the activating and controlling factor. So, Pitta and Vata are considered as the prominent Doshas in this part of Drishti. when the Doshas are vitiated in the First Patala, Avyakta Darshana accured, blurred vision in astigmatism also hense we can say that is pratham patal gat timira. That's why the proposed line of treatment is Vata Kapha Shamaka.

CONCLUSION

Vata-pitta Shamaka. Abhyang is specifically done in murdha pradesh which causes vasodilatation in the skin and muscles by stimulating receptors of the sympathetic nervous system. Vasodilatation increases blood flow and helps to remove the toxic products and swedan karma helps to dissolve shleshma, makes the channels soft, by which vatadi doshas and other contents can flow through in their normal directions.

REFERENCE

1. https://www.amazon.in/Ophthalmology-A-K-Khurana-Clinical-Medicine/s?rh=n%3A4149633031%2Cp_27%3AA.K.+Khurana
2. <https://hbgmedicalassistance.com/ayurveda/treatment-refractive-error-without-surgery/>
3. <https://hbgmedicalassistance.com/ayurveda/treatment-refractive-error-without-surgery/>
4. file:///C:/Users/user/Downloads/article_1624964354.pdf
5. file:///C:/Users/user/Downloads/article_1624964354.pdf
6. <https://www.mayoclinic.org/diseases-conditions/astigmatism/symptoms-causes/syc-20353835>
7. Astigmatism, Aoa.org, 2021 [cited 22 July 2021]. Available from: <https://www.aoa.org/healthy-eyes/eye-and-vision-conditions/astigmatism?sso=y>
8. <https://en.wikipedia.org/wiki/Astigmatism#:~:text=The%20prevalence%20of%20astigmatism%20increases,five%20and%20seventeen%20have%20astigmatism.>
9. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10045990/>
10. <https://www.linkedin.com/pulse/understanding-astigmatism-indians-causes-prevalence-treatment->

george#:~:text=According%20to%20a%20study%20published,in%20India%20is%20aro
und%2030%25.

11. Sushruta samhita with ayurveda tatva sandeepika hindi commentary uttartantra by Kaviraj Ambikadutt Shastri, Chaukhambha Sanskrit series, varanasi 2009 18/17.
12. file:///C:/Users/user/Downloads/article_1690960447.pdf
13. https://www.researchgate.net/publication/345311660_KRIYAKALPA_THE_UNIQUE_MANAGEMENT_OF_EYE_DISORDERS_USING_AYURVEDIC_PRINCIPLES