ABSTRACT
Refractive error is one of the common problems of modern man. This all may be due to the changes in lifestyle and extensive use of computers. Refractive error involves problem of refraction. Normally parallel rays of light focuses over the retina through which the normal perception of image is attained. In refractive errors the correct focusing of light rays doesn’t happen over the retina results in blurring of vision and various other symptoms due to the over straining of eyes like headache, excessive lacrimation and deep seated orbital pain. Refractive errors can be classified as myopia (short sightedness), hypermetropia (long sightedness) and astigmatism. In myopia focusing will be in front of the retina due to which the person experiences difficulty in seeing distant objects, where as in hypermetropia, near vision will be impaired due to the delayed focusing of light rays. Astigmatism is the distorted image formation due to the scattered focusing of light rays. The Ayurveda possesses various treatment approaches for the curing of refractive errors including utilization of herbal formulation, yoga and change in life style. This article summarizes some options as per ayurveda for the treatment of refractive errors.

KEYWORDS: Refractive errors, Ayurveda, Astigmatism, Myopia.

INTRODUCTION
Refractive errors comprise a group of diseases like; myopia, hypermetropia, astigmatism and presbyopia. Myopia is seen generally in childhood diagnosed in children in age group of 8-19 yrs. Symptoms include blurred distance vision, eye strain, sometimes headaches, watering of
eyes. Astigmatism is the condition which is caused by uneven shape of cornea resulting in blurred or distorted vision at all distances. Some area of cornea becomes more round. Hypermetropia is the condition in which near vision affected. This involves defective refraction that forms image behind the retina symptoms involves eye strain, headache, watering of eyes.

Due to the today’s life style eyes have to bear a lot of stress resulting disease like refractive errors. Ayurveda has many treatment options relief today’s stressed life style, strengthening eye muscles. Study shows that eye exercises and ayurvedic procedures are very effective in correcting refractive errors in children. Ayurveda suggest early diagnosis, healthy life style and reduced eye stress can relief from diseases. The major treatment procedures as per ayurveda are; Nethradhara, Anjana, Aschotanam, Nasya, Tharpanam and Ayurvedic Medicines. This article summarizes some options as per ayurveda for the treatment of refractive errors.

**Go Ghrita in the Management of Astigmatism**

Astigmatism and uncorrected refractive error is the leading causes of blindness and vision impairment in the world. *Go Ghrita* is an important Ayurvedic drug utilize for the treatment of many diseases. Recent study suggests that *Go Ghrita* effectively utilized for the treatment of vision impairment problem like Astigmatism. The effectiveness of drug towards the Astigmatism attributes due to the presence of various important phytoconstituents like; Tannins, Saponins, alkaloids, Glycosides, Carbohydrates and Flavonoids in the Ghrita.

**Refractive Error Treatment through Swasthavritta and Yoga**

Ayurveda maintain the health of individual. To full fill this purpose Ayurveda has specialized and most demanding branch named *Swasthavritta*, means science for maintenance of health in all aspects. *Swasthavritta* advocates procedures and measures under the heading of *Dinacharya, Ratricharya, Adharniya, Dharaniya Vegas, Ritucharya* etc., by following these one can maintain the health and eye care. *Swasthavritta* possesses various concepts to eye care through *Chakshushya Vidhis*, medicine and diet for the protection, restoration and regeneration of the eyesight. *Chakshushya* regimen mentioned in the classics along with *Yoga* is useful in prevention of ophthalmic problems. The preventive measures include *Pathya, Dinacharya, and Ritucharya*. Regular use of *Chakshuhya regimen*, *Kriya kalpa* and eye exercise help in improvement and restoration of vision. Many studies suggest that *yoga* can be beneficial in many ways for improving eye sight.
Rasayana Churna in Refractive Errors

A study was conducted to assess the chakshushya effect of Rasayana churna in the treatment of refractive errors. Study Suggest that Rasayana Churna can be considered as curative and preventive measure in refractive errors like myopia. Combination of Guduchi (Tinospora cordifolia), Amalaki ((Emblica officinalis) and Gokshura (Tribulus terrestris) is known as Rasayana Churna. Study shows that after taking Rasayana Churna symptoms related to myopia like Double vision, Haziness reduces from severe to moderate. Refractive test also showed changes in the distance correction of both eyes. Study observed that near correction of eye was improved after the treatment. Study concluded the positive result of Rasayana Churna on myopia.

Effects of Jaloukavacharan in ophthalmic disorders

Ophthalmic disorders are very common in today’s life. As per Ayurveda Raktamokshana is one of the important procedures of Shodhana Karma which is very useful in the treatment of eye diseases. Jaloukavacharan (Leech Application) is the best & effective method of Raktamokshsana because Leech is easily available & procedure is very simple.

Anjananamika & Abhishyanda are very commonly seen Ophthalmic Disorders. Jaloukavacharan (Raktamokshana) is indicated in these diseases as it is mainly cause due to rakta-pitta vitiation. Acharya Sushrutha & Vagbhata has mentioned that Jalouka (Leech) sucks impure blood from affected site after application & reduces symptoms like burning sensation, pain, swelling, redness etc.

Role of Ajaghrita (Goat ghee)

To prevent the diminishing phenomenon of tissues Ayurved has advised to consume oleation. Cow Ghee and Goat Ghee are best Regenerative drugs for eye care. These can be beneficial for the treatment of Nistoda, Sangharsha, Āadhmnā, Sthabdhatā, Netra Klama, Kampana, Avil Netra. These problems need supplements like; Vit A, multivitamin treatment; Zink and other nutritive supplements. These problems can be solved in the better way with adopting proper food and medicines regularly like; Ajaghrita. Goat Ghee possesses “Cakshusya” and it has excellent vitality. Studies revealed that Ajaghrita relief ocular pain; dryness and fatigue. Alschyotana (local application) is a kind of local treatment for eye which is implemented as eye drops. Goat ghee was administered as eye drops in the selected patients of Vataj. Cow Ghee is most often used for this purpose as it is easily available. The efficacy of goat ghee in the eye disorders is well proved by clinical approach.
Ayurveda Exercise for Refractive Error

Ayurveda suggest some simple exercise for the treatment of refractive errors like; Samshodhan, Tratak karma, Palming etc.

- **Samshodhan**: Virechan karma is used for shodhana purpose.
- **Tratak karma**: To concentrate on some point till watering of eyes.
- **Palming**: Palming involves closing both eyes by using both palms.

CONCLUSION

The diseases of the eye are much more important than any other physical disability since the loss of vision completely disables the patient. Ayurveda provides various approaches to overcome refractive errors like Go Ghrita, Swathavritta and Yoga, Rasayana Churna, Jaloukavacharan, Ajaghrita and exercise play vital role for improving eye vision. Psychological behavior and health education for positive changes in attitude and practices also improve conditions. Care from such conditions is required to be exercised in carrying out its proper diagnosis and treatment. It has been observed that the person who indulged in more near work e.g. working on computer monitor. Relief in signs and symptoms was observed in various studies done for ayurvedic therapy to prove clinical role of ayurveda for disease. Sushruta, has recommended ayurveda for various ophthalmic disease. The various studies suggest that ayurveda can be effectively used in different forms of refractive errors without any major adverse effect.

REFERENCES
