

**MAINTAINING HEALTH OF EYE (VISION) BY AYURVEDA – A  
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Eyes hold special status among all the sense organs because good vision is crucial for social and intellectual development of human beings. Hence, eyes are the most precious gift of God to mankind. As per the WHO statistics global blindness due to eye diseases is 37 million, due to refractive errors it is 8 million. Ayurveda is a philosophy of life with holistic approach which plays an important role in prevention of blindness. Prevention of ocular disorder and preservation of ocular health has been become essential, as changing lifestyle has resulted in many eye disorders. In Ayurveda, eye is

considered as the most vital sense organ. Many diseases of eye may occur due to defective life style changes particularly in busy modern life. Ayurveda found to describe vividly about ocular health. So an attempt has been made to explore the diet, behaviour procedures for maintaining eye health. Many of the classics explained Chakshushya food items and drugs such as ghee, amalaki, wheat etc which can be regularly used along with dietary and behavioral practices which are harmful for the eyes. Procedure like Anjana (collyrium), Aschyotan (eye drop), Snana(bath), Padabhyanga (foot massage with oil), Nasya (nasal application of drugs), Abhyanga (oil massage), various yogasana, rasayana etc are considered as highly effective daily procedures for the maintenance of eye health.

**KEYWORDS:** Healthy Eye, Eye care, Chakshushya, Rasayana, Ayurveda.**INTRODUCTION**

“Sarvendriyānām Nayanam Pradhānam” by Chanakya in Neeti Shatakya. Eye is the source of direct knowledge. Sushruta has given more importance to eye which is evident from the fact that the Uttartantra of Sushruta Samhita starts with eye diseases and 19 chapters are devoted

only to eye disease. So one has to take necessary efforts to include these methods for prevention of eye diseases. Smoking, cigarette, tobacco, alcohol, high fat diet and junk food, chronic stress, prolonged exposure to bright light, working on computer for long time etc, are few examples which exert damage to the eye. Some eye disease like Age Related Macular Degeneration (AMRD), Diabetic or hypertensive retinopathy, Computer Vision Syndrome, may cause due to faulty life style. For preventing such type of eye diseases and for maintaining ocular health everyone should follow Ayurveda. Dinacharya (daily regimen), Ritucharya (seasonal regimen) and specific therapies like rasayana therapy, sadvritta- palan and kriya kalpa described in Ayurveda are useful to restore eye health and proper vision.

### **Dinacharya (Daily Regimen)**

Dinacharya regarding maintaining eye health is described in Charak Samhita sutara sthan chapter 5, Sushruta Samhita Chikitsa sthan chapter 24, Astang hrudya Uttarsthan chapter 13 and pathya, apathy in eye diseases described in Yogratnakar, Bhaishjyarnavali in Netrarogadhikar adhyayas. While Charak starts daily regimen with anjan (eye salve) Sushrut advised Netraprakshalana (Eye wash): Washing eyes with decoction of Lodhra or with Amalaka (*Emblica officinalis*) swarasa (juice) after getting up from bed in the morning.

**Anjana (Collyrium):** Anjana is a method in which the medicine is applied along the inner surface of eye lid. Souveeranjan or darvi rasa kriya can be mixed with honey can be applied in the eye for kapha shodhana as eye is Teja predominant and should be protected from kapha dosha. Anjana can dissolve the accumulated vitiated kapha and drains it out, it dilates the blood vessels and increase the blood flow and maintain netra stratus intact.<sup>[1]</sup>

**Abhyanga:** It is the procedure in which the oil is applied on the head. Oil is best for vata dosha. The vata dosha confined to eye is pranavayu and the seat of pranvayu is in the head (murdha). When the oil is applied to the scalp, medicinal effect reaches up to brain. Daily application of oil on head selected and medicated according to “prakriti” of a person is a preventive measure of the eye diseases.<sup>[2]</sup>

**Snanam (Bath):** Generally, the sense organs get freshness with bath. The temperature mechanism is maintained and blood circulation is kept intact. Warm water preferably for body bath and cold water for head bath. Hot water for head bath will adversely affect the hair and eyes.<sup>[3]</sup>

**Nasya:** The procedure in which, medicines are given through the nasal cavity called Nasya. Nasal cavity anatomically leads to structures of the head. Due to anatomical communications the medicine applied through the nasal cavity reaches all the areas, particularly strengthens the “Sringatak Marma” which is the seat of all the centers of eye, ear, nose and tongue.<sup>[4,5]</sup> Accumulation of vitiated kapha in the stratus of the eye can be prevented by daily application of **Pratimarsh Nasya**.<sup>[6]</sup>

**Mukhalepa:** Application of medicines on face in the form of poultice is called mukhalepa. The facial artery, facial nerve and trigeminal nerve are lying along the cheek, having branches to the eye.<sup>[7]</sup>

### **Padabhyanga Padaprakshalan and Padatran Dharan**

Taking care of foot is also essential as the foot is connected to eye. - Foot is the end organ and the nerve ending are highly sensitive. The stimulation of nerve endings of the foot reflects in the eye via sympathetic and parasympathetic supply so, foot should be kept clean and footwear should be used to avoid physical injuries to the foot as padabhyanga, padaprakshalana (cleaning foot) and padatran dharan (using footwear) has chakyushya effect (maintain vision).<sup>[8,9]</sup>

**Use of umbrella:** Use of umbrella protect the eyes from sun, heat, dust and smoke and it is chakshyushya.<sup>[11,13]</sup>

**Ahara (Diet) and Eye Health:** Acharya Susruta and many of scholars broadly explained the causes or aetiological factors diet of eye diseases, thus if anyone tries to avoid the same can protect their eyes.

Susruta, Charaka, Vāgbhata, Bhāvamisra and so many ācharyas well explained about the dietary (āharaja) and behavioural (vihāraja) causative factors of eye diseases. These factors can be summarized as follows.

1. Excessive use of Shukta (Vinegar), Aranāla (gruel or kanji in sour taste), Amla (sour edibles) and alcohol. All of these are hot in potency (Virya) and Katu in Vipaka. Hot potency and Katu Vipaka are the opposites of Ōjas. Causes Ōjaskshaya and produces eye diseases.
2. Excessive intake of Kulattha (horse gram). Horse gram is predominant of astringent taste and Katu Vipaka. Thus vitiates Rakta Dhātu and Pitta Dosha; causes Raktaja and Pittaja eye diseases.

3. Excessive intake of Māśa (black gram). Black gram has Guru and Snigdha properties and sweet taste. It vitiates Kapha Dosha and causes Kaphaja eye diseases.
4. Excessive intake of liquids and Intake of more liquids before, after or in-between the meals causes hypo-vitaminosis and produces eye diseases.
5. Excessive use of Ushna (hot), Kshāra (alkaline) and Katu food, drinks and drugs.<sup>[14]</sup>

### **Beneficial (Pathya) food items for eye according to Ayurveda**

Many of the classics explained Chakshushya food items and drugs which can be regularly used. (Lohitasali (Red rice), Yava(Barley), Mudga (Green gram), Vanyakulattha (Dolichos biflorus), Jeevanti (Leptadenia reticulata), Punernava (Boerhavia procumbens), Patola (Trichosanthes dioeca), Kumari (Aloe vera), Chandan, Karpura, Draksha, Grapes, Kurma mamsa(Turtle flesh), Nari paya(human milk), cow milk, Hasteeni paya (Elephant milk), Ajaghrith (Ghee prepared from goat milk), Kheeratha takra (Butter milk), Peya, Vilepi, Yusha, Swarna (Gold), Kamsya (Bronze), Mukta (Pearl), Vidruma (Coral), Vajra (Diamond).

In Ashtanga Hridaya recommended that old grains like barley (Yava), wheat (Godhuma), brown rice (Shali & Shashtika), kodo millet (Kodrava), green gram (Mugdha) with ghee is beneficial for the eye sight. Meat of wild animals, vegetables, pomegranate, sugar, saindhava (Rock salt), plums (Drāksha) and rain water are also highlighted as Chakshushya by Vagbhata.

According to Bhavaprakasha brown rice (Shali), green gram (Mugdha), barley (Yava), flesh of wild animals specially birds, amaranth varieties (Vatsuka, Tanduliyaka), snake gourd (Patola), spiny gourd (Karkatoka), bitter gourd (Karavella), flat beans (Nishpava) flesh of Vārtaka are the food substances which should be regularly used for preventive care of eye diseases.

Bhavamishra recommended cooking all above mentioned food items with ghee. All the food items which are sweet and bitter in taste also can be used as Chakshushya dravya.<sup>9</sup> Yogaratnakara also highlighted sweet and bitter taste food as beneficial for eyes.

The Susruta Samhita quoted that a person who takes old ghee, asparagus (Shatavari), snake gourd (Patola), green gram (Mugdha), indian gooseberry (Āmalaki) and barley (Yava) regularly should not be afraid of the dreadful disease Timira (visual impairments). Water clove (Sunishannaka), bitter gourd (Karavella), amaranth species (Tanduliyaka and Vatsuka),

brinjal (Vartaku), Kair (Karira), drumsticks (Shigru), radish (Mūlaka), flesh of birds and meat of wild animals (Jangala mansha) are also recommend for Timira. Further Susruta explained the food preparations of the same items such as Āmalaki and Shatavari can be prepared as Pāyāsa (milk rice). Also mentioned barley boiled with plentiful decoction of Thriphala and added profuse quantity of ghee alleviates Timira. Old ghee kept in an iron vessel is beneficial for Timira (immature cataract) as well. Blurred vision is the initial symptom in the Timira.

**Apathya Ahara for Healthy Eye:** Amla rasa (Sour), Lavana(Salt), Kshara(Alkali), kat u rasatmak ahara, Masha (Horse gram), Kalingaka patrasaka, Phanita, Tambula(Piper betel).

**Nidra (Sleep) and Eye Health:** Sleep rejuvenates the mind and body. Sound sleep is absolutely necessary for the eyes. During sleep, the eye is at complete rest and retains functional capacity. Normally 6-8 hours of sleep is necessary for a normal adult. Sleep deprivation leads to many eye disorders like floppy eye lid disorder, dry eye, asthenopic symptoms, sudden vision loss after awakening becomes permanent (AION),swelling of optic nerve, blurred vision, changr in color perception. When natural urge of sleep is hold it leads to Akshigaurabam (heaviness and fatigue in eyes). In the context of etiological factors responsible for eye diseases Sushruta has mentioned “Swapnaviparyayat” (false sleep).<sup>[16,18]</sup>

#### **Mana (Mind), Stress and Eye Health**

A good, balanced mental status is essential for proper functioning of the eyes because sense organs can perceive the objects only in presence of mind. Stress hormones like cortisol are secreted and activation of hypothalamic pituitary adrenocorticosteroid leads to further arteriole dilation and venous constriction. So eye disease like central Serous Chorioretinopathy is believed to be exacerbated by stress and corticosteroid use.<sup>[19,20]</sup>

**Yoga and Eye Health:** Trataka and Neti Kriya may help to improve vision and maintain the eye health. Hathayoga Pradipika and Gherand Samhita clearly mention at that accepting procedures like Trataka and Neti Kriya regularly helps to improve vision and prevent the diseases of eye.

**Rasayana Therapy and Eye Health:** All the materia medica and treatment procedures which create doshic balance (somatic and psychological) are equally implies to the treatment of eye along with a group of materia medica coined as ‘Chakshushya rasayana’ had been highlighted by our ancient scholars. Chakshushya class of medicines has a targeted action on

the eye and visual apparatus. Triphala is one such combination which can correct the imbalance of doshas as well as bring them to normalcy along with specific vision promoting effect. The ingredients that make up triphala are very potent individually; when combined correctly, synergy enhances the efficacy and healing quotient exponentially.<sup>[21,22]</sup>

### **Triphala: Haritaki, Vibhitaki, AmalakiHaritaki**

It's botanical source is Terminalia chebula and called as Chebulic Myrobalans in Latin. Charaka goes so far as to say that **Haritaki** is as nourishing and useful for everyone as mother's milk. He mentions that it's a rasayana for the eyes, hence it can be used to prevent the eye diseases. Haritaki has an anti-aging value "vayasthapani" (antiaging). Thus advised in the prevention of age related eye disorders like Age related macular degeneration (ARMD), Senile Cataract, Open angle glaucoma and Retinal degeneration. Vibhitaki - The botanical source is Terminalia bellerica. It is said to be best homeostatic, meaning that it helps to regulate the internal environment specially the circulation of pure blood in the body. It is an ideal herb for pacifying both Pitta and Kapha. Acharaya charaka quotes vibhitaki as netre hitam, meaning it is beneficial for the eyes.

**Amalaki:** The botanical source is Emblica officinalies. It helps in purifying toxins from the body, by enhancing food absorption. When our digestion becomes stronger, the food we eat is converted to nutrition rather than staying undigested and producing impurities (Aama). Thus flushes out the toxins out of the body. The eyes are another organ that specially benefit from Amalaki. In fact, Amalaki is called chakshusya, which means "a rasayana for strengthening the eyes.

**External/Topical use of Triphala:** Netra prakshalana, Netraseka, Vidalaka, Pindi, Aschyotana, Anjana, Tarpana and Putapaka comes under Bahirparimarjana of Netra roga.

**Internal Use of Triphala:** Triphala possess tridoshasamaka property, Cakshushya as well as good kostha shodhaka hence it can be jolly well used in all Netra vikaras for the purpose of shodhana (procedure by which excess accumulation of vitiated doshas from the body is removed). Hence Triphala is used as both shaman (procedure by which accumulation of vitiated doshas from the body is pacified) and shodana in day today clinical practice to prevent and manage ocular disorders. Acharayas highlighted the role of triphala prayoga as shamana mainly in Drishtigata vikaras (group of eye disease in which vision is mainly affected). Triphala is used as rasayana dravya in all drishtigata rogas only by changing the

anupana (adjuvants) depending upon the doshic predominance. For eg: Triphala with madhu, taila and ghrita in Kaphaja, Vataja and Pittaja Netra roga respectively.

**Use of Triphala** is also quoted in drugs which prevent one from eye ailments. Triphala churna along with madhu (honey) and ghrita (ghee) is considered to be the best rejuvenation therapy for eye disorders.

**Triphala: Yogas** (Formulations) Famous yogas containing Triphala as main ingredient, which are utilized in day today ophthalmic practice are Triphala Churna, Sadanga kwatha guggulu, Triphaladi kwatha, Triphaladi anjana, Triphala varti, Triphaladi rasakriya, Nagarjuna varti, Kokilavarti, Drustiprada varti, Candhanadi varti, Lohadi guggulu, Timirahara lauha, Saptamruta loha, Triphaladi ghrita, Mahatriphaladi ghrita and Triphala Guggulu.

## DISCUSSION

Present day lifestyle choices i.e. less activity level, sedentary lifestyle and progressive weight gain also contribute to risk of developing the, metabolic syndrome, which consequently have their ill effect on the most vital organ eye. The causative factors for eye diseases explained in the classical texts exactly fits the today's lifestyle practice which in turn generate eye diseases. Activity such as reading while travelling produce difficulty in accommodation and thus causes ailments of vision. It was found that person with an active lifestyle (defined as regular activity) were 70% less likely to develop neo vascular AMD compared with person without an active lifestyle. Kriya kalpas have major role as a remedy for lifestyle induced eye diseases. Kriya kalpas such as Aschyotana, Anjana, Nasya etc are both prevention as well as treatment modalities.

**Aschyotana** (eye drop) is a basic therapeutic intervention which is beneficial in wide variety of eye diseases. Daily practice of **anjana** is best simple ophthalmic medication to prevent eye diseases. **Abhyanga** nourishes all sens organs and also acts as Dristiprasadana. **Nasya** particularly strengthens the "Sringatak Marma" which is the seat of all the centers of eye, ear, nose and tongue. the medicinal value of **Mukhalepa** in turn affects the eye also. **padabhyanga**, **padaprakshalana** (cleaning foot) and **padatran dharan** (using footwear) has chakyushya effect(maintain vision).

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**CONCLUSION**

Thus various lifestyle exposures are found closely associated with eye diseases. The prevention modalities advocated in Ayurveda such as Aschyotana, Anjana, Nasya etc. along with a few positive lifestyle modifications may help considerably reducing the impact of ocular diseases in general population.

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