



AYURVEDIC APPROACH FOR PREVENTION OF *NETRA ROGA*

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ABSTRACT

Ayurveda has stated “*Sarvendriyanam Nayanam Pradhanam*”. Ayurveda gives prime importance to the eye and primarily aim at the prevention of disease and promotion of positive health. Association of eye diseases with *Dinacharya*, *Ritucharya*, *Ahara-Vihara*, Mind, Occupation, and Aging process are also important. Factors like continuous hours spent reading, watching TV, using mobile and working on computers take their toll on eye health. Ayurveda possesses vivid information about the lifestyle leading to healthy living and also the preventive strategies in general.

Globally, approximately 250 million people suffer from varying degrees of vision loss. Leading causes include several eye conditions considered in this Special Issue, such as cataract, ARMD, glaucoma, and diabetic retinopathy. These conditions disproportionately affect older adults, and with an ageing population the number of affected individuals is predicted to increase exponentially. Whilst the aetiology of age-related eye disease is complex and multifactorial,

To prevent from all these hazards effect on health of human being Ayurveda is the only choice. Ayurveda system of medicine is probably the first which efforts to protect life from diseases and ageing. The science of Ayurveda is not only holding within it the measures for alleviation from discomforts but its foremost aim is the maintenance of homeostasis and better approach towards healthy and happy life. The aim of this article is to describe the measures which enhance the *Vyadhikshamatva* and prevent the eye diseases and maintain ocular health.

Key Words: *Vyadhikshamatva, Netra, Akshitarpana, Nasya, Rasayana, Anjana, Gandoosha*

INTRODUCTION

Many people prone to various eye disease due to abnormal use (*Atiyoga, Ayoga, and Mithyayoga*) and breaking their dietary habit (*Aharaja*), change in climate etc. The most important thing in relation to health and disease is immunity of the body. Concept of *Vyadhikshamatva* (Immunity) described in the classical

texts of Ayurveda is similar to immunity. It is not exaggeration to mention that, Ayurveda described *Vyadhikshamatva* in more detail and magnificent way which can be considered equivalent to modern concepts of immunity. Aim of presents article to how to maintain our *Pradhana Indriya* healthy by various Ayurvedic methods which enhance *Vyadhikshamatva* and prevents *Netra Roga*.

AYURVEDIC METHODS FOR PREVENTION OF NETRA ROGA

1. Rasayana (Rejuvenation therapy)

Taking *Rasayana* is helpful to increase the immunity of the person to keep him away from opportunistic diseases. The possible mechanisms by which action of *Rasayana* can be interpreted with modern aspects are; nutritive function, immunomodulatory action, antioxidant action, anti-aging effect, neuroprotective action, haemopoietic effect etc.

Chakshyushya Rasayana described in different *Samhita*. The person who follows regular diet and regularly takes *Triphala* powder along with honey and Ghee in the night is always free from diseases of eye.

In recent years numerous researches have been done to explore Ayurvedic treasure for benefit of common people to improve health by using different Ayurvedic drugs. Some examples are:

1. Immunostimulatory effect of *Curculigo orchioides* Gaertn.
2. Antioxidative effect of *Triphala* (combination of *Terminalia chebula* Retz, *Terminalia belerica* Roxb. and *Emblica officinalis* Gaertn).
3. Antibacterial activities of *Emblica officinalis* Gaertn. and *Coriandrum sativum* L.
4. *Haridradi Ghrita* (Polyherbal medicated *ghruta*) shows the Immunomodulatory activity (preferential stimulation of the components of cell-mediated immunity) in rats during a trail.
5. Immunomodulatory activity of *Triphala* (combination of fruit pulp of *Terminalia chebula* Retz, *Terminalia belerica* Roxb. and *Emblica officinalis* Gaertn).

Probably mode of action of Rasayana drugs

Rasayana act at three levels such as at the level of *Poshaka Rasa* (increases nutrition), at the level of *Agni* (increases digestion and assimilation of food) and at the level of *Srotas* (increases absorption of food from serum to various parts of body).

2. Akshitarpana

Tarpana is useful both in healthy as well as diseased persons. It is commonly indicated in refractive errors, macular degeneration, computer eye strain, degenerative conditions, myasthenia gravis, drooping of eyelid. and also in healthy eye.

Netra Tarpana may help to nourish eyes, increase blood circulation to the affected area, gets rid of *Dosha* imbalances, strengthens the muscles in the area, helps on improving eye sight. *Netra Tarpana* is an excellent soothing, relaxing eye treatment to rejuvenate eyes and surrounding tissues.

Mode of action of Akshitarpana

Considering the *Doshakarma*, the overall effect of the compound drug is *Vata Pradhana Tridosha Shamaka* and hence it disintegrates the pathology of *Timira*, which is also *Vata Pradhana Tridoshaja* in its manifestation. The *Ghrita* has the quality of trespassing into minute channels of the body. Hence, when applied in the eye, it enters deeper layers of *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 cell, because the cell membrane also contains lipid. This lipophilic nature of *Ghrita* facilitates the entry of drug into the eyeball through the corneal surface since the corneal epithelium is permeable to lipid-soluble substances and lipid-soluble substances cross the corneal epithelium irrespective of their molecular size. Moreover, tissue contact time and bioavailability is more and hence therapeutic concentration can be achieved by *Akshitarpana*. This facilitates the action of drug by two ways. First by allowing more absorption

of the drug by the corneal surface and secondly by exerting direct pressure upon the cornea. There may be changes in the refractive index of the cornea causing less convergence of light rays. It also helps in anaerobic oxidation which prevent the cornea and Lens from oxidative injuries. So, *Tarpana* is best treatment modality for Eyes Disease. It maintains the health of eye.

3. *Nasya Karma*

Nasya stimulates *Sringataka Marma*, which nourishes all sense organs, including *Netra* (seat of all the centres of vision, smell, hearing and taste). By *Shodhana* property of its ingredients, probably removes the *Aama* at the cellular level and pacifies the vitiated *Vata* and *Kapha dosha*, and nutrition is brought to the respective sites.

Anu taila as *Pratimarsh Nasya*: 2 drops in each nostril improves vision and keeps the strength of other sense organs healthy and free of flaws.

4. *Netraprakshalana (Eye Wash)*

It helps in the cleansing of the eyes by eliminating dust and foreign materials, allowing for clear vision. Decoction of *Triphala*, *Lodhra*, *Madhuyasti* is used as an eyewash in various refractive errors like *Timira*, Red eye, Pain in the eye etc.

5. *Anjana (collyrium)*

Usage of *Anajana (Souviranjana / Rasanjana)* is good for the eyes and helps to remove *Kapha Dosha* from the eyes in the form of tears, keeping the eyes clean. It cleanses the human eyes, causing them to shine like a bright moon in a clear sky. *Anjana's* action is linked to dissolving and emptying the stored vitiated *Kapha*. It dilates blood vessels, enhances blood flow, and keeps *Netra Srotas* in good shape. As a result, practising *Anjana* as *Dinacharya* regularly is the finest simple ophthalmic treatment for preventing eye disorders.

6. *Nidra*

Sound sleep is absolutely necessary for the eyes. During sleep, the eye is at complete rest and retains functional capacity. Sleep deprivation leads to many eye disorders like floppy eye lid syndrome, dry eye, asthenopic symptoms, sudden vision loss after awakening becomes permanent (AION), swelling of optic nerve, blurred vision, change in colour perception. When natural urge of sleep is hold it leads to *Akshigauravam* (heaviness and fatigue in eyes). In the context of etiological factors responsible for eye diseases Sushruta has mentioned "*Swapnaviparyayat*" (faulty sleep).

7. *Padavyanga, Padaprakshalana and Padatra Dharan*

Regular massage of feet is advised because it is assumed that in the centre of feet (soles) 2 *Siras* are situated which are greatly connected to the eyes. These are vitiated by the accumulation of debris, attack, trauma from stone or foreign particles, and result in eye disorders. Medicines applied over the feet, feet massage, external application of oil etc. transmit the benefit to the eyes. Hence feet should be kept clean, healthy and away from the heat by using footwear, washing them well and massaging with oil. *Padabhyanga* affects both *Sthanik Dosha* (local factors) and *Sarvadehik Dosha* (general factors), according to various Ayurvedic texts. Regular foot massage improves visual clarity. Acharya Charak and Vagbhata have described it as *Dristi-Prasadaka*. Acharya Sushruta has also described it as *Chakshushya*.

8. *Kaval and Gandoosha*

The special methods of medication in which the medicines are applied in the mouth in the form of liquid and semi solid are called *Kavala* and *Gandoosha*. The medicine is in liquid form so that while shaking the medicine reaches all parts of the oral cavity. The ophthalmic branch of facial artery lies along the cheek. Medicine may get absorbed through mucous membrane due to pressure effect of the liquid medicine. The structure of the eye may get nourished, stimulated, evacuated or maintained by the medicinal value of the drugs used for *Kavaal*.

9. Chatradharana (Use of umbrella)

Use of umbrella protects the eyes from sun shine, heat, dust and smoke and it is *chakshyushya*.

10. Yoga and Eye Health

Yoga especially *Shat Kriya*'s like *Trataka* and *Neti Kriya* may help to improve vision and maintain the eye health. *Hathayoga Pradipika* and *Gheranda Samhita* clearly mention that accepting procedures like *Trataka* and *Neti Kriya* helps to improve vision and prevent the diseases of eye.

11. Sheetodaka Shira Snana

Generally, the sense organs get freshness with bath. Hot water is preferably for body bath and cold water for head bath. Hot water for head bath will adversely affect the hair and eyes.

12. Mana (Mind), Stress and Eye Health

Sense organs can perceive the objects only in the presence of mind. To maintain proper eye health and vision Vagbhta advised "*Manaso Nivrutti*" i.e., withdrawing mind from all the sensual functions. Stress hormones like cortisol are secreted and activation of hypothalamic pituitary adrenocorticoid leads to further arteriole dilation and venous constriction. So eye disease like Central Serous Chorioretinopathy (CSR) is believed to be exacerbated by stress and corticosteroid use. A clinical condition likes *Myokemia* (twitching of eye lid) and dry eye are other effect of oxidative stress. Again, stress induced hypertension may lead to retinal vein occlusion and other vascular disorders of retina.

DISCUSSION

Human eyes are extremely delicate organs that should be free from stress, near watching activities for a long time and living in a polluted environment. But due to the present way of lifestyle, our eyes have to bear a lot of stress and limited resistance against eye tissue. As a result, the person suffers from refractive errors, cataracts and other eye problems. Apart from treatment modalities, Ayurveda believes in enhancing *Vyadhikshamatva* by daily and seasonal regimens, *Pathya-Apthya*, *Yoga*, *Asanas* and *kriyakalpas* such as *Aschyotana*, *Anjana*, and *Nasya* etc. are both prevention (by enhancing *Vyadhikshamatava*) as well as treatment modalities. Eye diseases due to ageing process are inevitable but can be delayed by taking *Chakshyushya Rasayana* (Rejuvenation therapies for eyes). Above all promotive care and restoring measures are described in the classical text of Ayurveda, neutralizing the effect of today's stressed lifestyle over eyes, strengthening eye muscles, making lens fibre elastic etc. Once a permanent mechanical change develops in the shape of an eyeball, then it is not possible to reverse the change. Therefore, persons should daily follow a seasonal regime, proper dietary habits, eye exercise, *Yoga*, *Pranayama* and *Shatkriya* for enhancing *Vyadhikshamatava* of eye and developed preventive aspect of eye diseases.

CONCLUSION

Thus, various lifestyle exposures and growth and aging factors are found closely associated with eye diseases. It was noticed that in spite of living in same lifestyle only some persons get affected while others remain unaffected. It was also seen that some of the disease's persons get rid of their disease even without treatments. The occurrence or non-occurrence, mildness in every aspect forced the ancient scholars to think of those very factors which were responsible for these inter-individual's variations. The same was named as *Vyadhikshamatva* by acharya Charaka. So, the prevention modalities advocated in Ayurveda by enhancing *Vyadhikshamatava* by a healthy lifestyle involving good daily routine, dietary habits and avoidance of causative factors, *Aschyotana*, *Tarpana*, *Anjana*, *Nasya*, *Abhyanga*, Various *Netra Vyayama*, *Yoga*, *Pranayama*, and *Satkriya* are beneficial for maintaining eye health and preventing eye diseases.

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