



RESEARCH ARTICLE

HEALTHCARE REGIMEN FOR EYES IN PRESENT ERA OF COVID-19 PANDEMIC DISEASE W.S.R TO AYURVED DINACHARYA: A REVIEW ARTICLE

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ABSTRACT

Current situation of world is at stake & with every upcoming day it is getting worst due covid 19 pandemic disease. All the healthcare industries and scientist are now engaged in the Race of finding out the vaccine for covid 19 disease but it takes time from months upto years to formulate a standard vaccine. That's why here comes the time to adapt the new life style changes, as the current pandemic situation demands. As per WHO & American academy of ophthalmology, the chances of corona virus transfer through eyes are strong. And we know that every sense organ has its own counter mechanism system to fight against invading foreign matter. Our Eyes also have its own protective mechanism in the form of tears, enzymes, blinking of eyes, lysozymes & immunoglobulins. Ayurveda contends that routines help establish balance and that understanding daily cycles are useful for promoting eye health. If we follow the routines & procedures mentioned in Ayurveda Dincharya properly chances of infection and illness reduces. Our Acharyas have mentioned about Dincharya in samhintas. There are various daily rituals which, when practiced regularly like padhaabhyanga, Netraprakshalan, anajana, abhyanga, snanam, nasya, kaval & gandhush & mukhlepa, help to support a life of optimal wellness. Mann & eye health, vegavdharan, yoga and eye health, pranayam and eye health, ageing eye disease and rasayan therapy, triupsthambha etc are also important factors in maintaing eye health.

INTRODUCTION

The tradition of dinacharya is one of the single most powerful ayurvedic tools for improving overall health and well-being. Even if we only follow certain dinacharya rituals regularly in present condition we can reduce the chances of various eye infections. As we know present situation of COVID-19 pandemic disease, the Rule of Normal life for whole world changes. General precautions like hand sanitizing, using mask, social distancing are now becoming the rules of "new normal life" in current era of covid-19 pandemic. Thus it is a need of time to take care of most delicate sense organ of our body i.e, eyes. As we know that people are locked in their homes and most of them are passing time on television, mobiles & laptop. Online lecture for students, online meetings, presentations are important tasks and thus load on eyes increases making them weak leading to eye illness.

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Many school going children suddenly facing problems about eyes due to online lecture on VTD gadgets. This concludes that overall increase in the use of VTD electronic appliances is giving birth to many eyes related problems & putting forward challenges for us to solve. If we want to deal with this problem effectively then it is must to follow Dincharya mentioned in Ayurveda by various acharyas. To prevent diseases in long run & promote wellness various rituals are included in Dincharya like padhaabhyanga, Netryaprakshalan, anajan, abhyanga, snanam, nasya, kaval & gandhush, mukhlepa, mann & eye health, vegavdharan, yoga and eye health, pranayam and eye health, ageing eye disease and rasayan therapy, triupsthambha ... etc. This not only reduces symptoms but also build the eye health and gives vision aquity which every human deserve. The importance of preserving eye health and vision is rightly quoted by Vagbhatta that "all effort should be made by men to protect the eyes, throughout the life; for the man who is blind this world is useless, the day and night are the same even though he may have wealth"³. Acharya Shushruta mentioned five kriya kalpa i.e. Seka, Aaschyotana, Anjana, Tarpana and Putapaka.

The eye disease can be prevented and proper vision can be restored for long time by following certain points in daily life like dinacharya, Ritucharya, sadvritta and swasthabritta⁴

Dinacharya (Daily Regimen): Dinacharya for maintaining eye health is stated in ancient texts. Acharya Shushruta start daily regimen with Netraprakshalana (eye wash) whereas Acharya Charak recommend Anjan.

Netra Prakashalana: Washing eyes with decoction of Lodhra or with Amalaka (*Embolica officinalis*) swarsa, after getting up from bed in the morning⁵.

Nasya: The procedure in which, medicines are applied through the nasal cavity to nourish the organs above the clavicle called Nasya. Nasal cavity anatomically leads to structures of the head and so it is considered as the natural route to the head. Due to anatomical communications the medicine applied through the nasal cavity reaches all the areas, particularly strengthens the "Sringatak Marma" (cavernous sinus) which is the seat of all the centers of eye, ear, nose and tongue⁶. In short, Nasya always has action on the srotas (channels) and it cleans the Shirosthas. So that accumulation of vitiated kapha in the srotas of the eye can be prevented by daily application of Pratimarsh Nasya⁷.

Kaval and Gandoosha: The special methods of medication in which the medicines are applied inside mouth in the form of liquid and semi solid are called Kaval and Gandoosh. In Kaval, medicine is filled in mouth to such an extent that we can shake it. 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 Kaval. In Gandoosha the same function can be explained due to increase in permeability of vessels, which in turn facilitates more absorption of medicines as well the nerve endings of oral cavity stimulated and brings reflex action in the eyes.

Anjana (collyrium): Anjana is applied by using shalaka. It should be applied from inner canthus to outer canthus. It cleans the human eyes which makes them shine like the bright moon in the clear sky¹⁰. Daily practice of Souveeranjana (as dinacharya)¹¹ is advised as best simple ophthalmic medication to prevent eye diseases and to maintain the visual power properly.

Trayopasthambha (Tripods of Life): Ahara, Nidra and Brahmacharya- are sub pillars of life which hold and maintain the diseased free life on proper succeeding. Food should be taken at proper time. Suppression of hunger leads to weakness in visual perception. Pathya Ahara (wholesome diet) vihara (activities)¹², have positive effect on overall health. Virudha Ahara (unwholesome food) may lead to reduced vision and blindness¹³. Nidra (sleep) revitalizes the mind and body. Sound sleep is absolutely necessary for the eyes. During sleep, the eyes are at complete rest and recollect functional capacity. Brahmacharya is concerned to self-control of sense organs. Persons undergoing sexual intercourse during the menstrual phase lose their visual health¹⁴.

Vegadharana (suppression of natural urges)¹⁵: Suppression of natural urges has bad effect on whole body but suppression of tear and sleep especially leads to diseases of eye. Suppression of urges causes vataprakopa, leading to weakness of ocular tissues and strain to eyes. Prolonged office duties, class room, meetings and watching TV programs and continuous computer work nowadays are part of faulty lifestyle and quite evident for suppression of natural urges.

Feet wash (Padaprakshalana), Oil Massage on feet (Padabhyanga) and Foot wearing (Padatra Dharana): As per literature, two siras (vein) are situated in the midpoint of feet (soles) which are significantly connected to eyes. These transmit the effect of medications applied over the soles in the form of oil massage and promote the eye health and prevent the diseases. These veins vitiated by the accumulation of malas (dirt, assault of soles by hard substance and stone) or over pressure bring about abnormality of eye.¹⁶ Padaprakshalan- Washing of feet with clean water confers clear vision. Padabhyanga- Application of oil over soles always bestows sleep comfort and maintains vision. Padatran Dharan- Walking without foot wear on irregular surface causes harm to eye so use of footwear is beneficial for eye sight. Hence, every person should perform massage over soles with oil, washing them well & should use foot wears as simple preventive and promotive approach for eye problems.¹⁷ Joshi Nitesh R. & Ujwale Ramesh (2016) in a clinical study of the effect of Tila Taila Padabhyanga on eye strain of 60 patients for 15 days, observed 70% improvement in weakness of eye and 33.33% showed improvement in heaviness of eye.¹⁸ Use of umbrella¹⁹ prevents excessive light, heat and dust to eye. It acts as chakshushya (beneficial to eye). The procedure in which medication are applied to the nostril in a specified manner to nourish the organs above the clavicle known as Nasya²⁰. Nasal cavity structures have direct communication with the sensory neural structures of brain and this is a natural gateway to brain. Due to anatomical communication, the medicine applied through nasal cavity reaches to "Sringataka Marma" (cavernous sinus) which is the seat of all the centres of vision, hearing, smell, and taste. One who practices Anutaila as Pratimarsh Nasya (small dose of medicated oil) 1-2 drop in each nostril, gets a better vision and power of other sense organs remain intact and defects free.

Yoga practices and eye health: Purifying procedure like Netikiryā and Trataka help to promote clear eye vision and prevent the dosasanchaya²¹. In yoga asana palming, swinging and shifting movement of eyes & matsyaasana may give relief to eyes and prevent the refractive errors and other problems. Palming is the technique in which rubbing of own palms and then touching them to eyes. Palming process when used after meal is very useful for prevention of timira (Refractive error and development of cataract)²². Gopinathan, *et al* -Role of trataka yoga kriya and eye exercises in the management of Timir has done studied on 66 patients, in his work moderate improvements was observed in 6.25% and mild improvement in 56.25% of Timir patients²³. Pranayama- means 'extension or expansion of the dimension of Prana'. A good balance of mental status is essential for proper functioning of the eyes because sense organs can perceive the objects only in the presence of mind. Proper practices of nadishodhana and bhramri pranayama increases stress tolerance, calm to mind, improve circulation & reduce the muscles tension. All these may have role in promotion of eye health.

Rasayana healing and eye health promotion: The main Rasayanas adopted in eye health promotion are Naimitika Rasayana and Achara Rasayana. The appropriate use of Chakshushya and Rasayana Dravyas will help to maintain the health of the Netra and prevents age related eye disorders. The use of Yastimadhu, Ghrita and Triphala act as Rasayana. Acharya Vagbhata has advised that triphala along with honey and ghrita (butter fat) should be consumed at nights, daily for strengthening of eye sight²⁴. Dhruva Dabhi *et al.* observed that 55.56% myopic patients showed mild improvement and Moderate improvement was seen in 44.44% patients with triphalaghrita²⁵. Ghrita (ghee) and Navaneeta are extremely rich in vitamin A and choline with good amount of Vitamin-E, Riboflavin, Niacin and pantothenic acid; Vitamin K, foliate and Vitamin-B12 in small amount. Antistiffness factor present in butter prevents hardening of arteries and cataracts²⁶.

DISCUSSION

Recent technological invention has dramatically changed our daily lives. Various highly developed gadgets, connected to the internet, have changed the way we communicate, use humor, study, work, shop, play and behave in turn demanding more screen time. Every occupation demands screen time nowadays, in turn increasing eye strain. Eye disorders are most likely to occur in certain occupations e.g. prolonged exposure to computer screens, late night duties etc. From the forgoing it is clear that thousands of years ago, Ayurvedic treatises had very broad knowledge regarding Eyes including its disorders & treatment. The teachings and principles which were put forth in ancient times to keep one's health disease free, the exact same philosophy is implicated in modern times. Ayurveda is a philosophy of life which explained well about the health maintenance of else. Present day lifestyle choice i.e. low activity level, sedentary life style & progressive weight gain also contribute significantly to the risk of developing the metabolic syndrome which consequently has their ill effect on the most vital organ eye. Apart from the treatments daily & seasonal regimens, pathyapathya are support measures for well being. The causative factor for eye diseases explained in the classical form exactly matches the present day lifestyle practices which in turn generate eye disease. Ayurveda's simplicity, inclination towards natural modalities and a consideration of mansikstithi (psyche), besides other causes of an ailment are possibly the best reason explaining its popularity. Changes should be made in diet, behaviour and life style. While adopting the adjustments one can best follow the principles of Dinacharya (daily regimen), Sadavrutta (good conduct), Rasayana. Dinacharya, Achara Rasayana, Shodana & the other methodologies. Refinements in lifestyle through "Ayurveda" can help us to get a new remoulded pair of Eyes.

Conclusion

Main goal of ayurveda is prevention of any disease other than cure. Eyes play a vital role in our day to day lives and are perhaps the most precious gift we have. This world is visible to us because we are blessed with eyesight. Good eyesight is very important for our daily activities like reading, watching television, internet surfing, driving & what not. So those who wish to have prolonged healthy vision should keep the value of practices and daily regimen prescribed by ancient scholars because "Prevention is better than Cure." By including Ayurvedic visual health promotion and preventive measures as integral part of programmes to enhance community awareness may help to attain "The vision 2020: The Right to Sight" Global initiative goal of WHO.

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