



## Computer/Screen vision syndrome it's management: an Ayurvedic approach Reference Novel Coronavirus-19

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### ABSTRACT

Presently a Day because of the Covid-19 pandemic circumstance. Numerous individuals are Working From the home. Understudy is additionally going to the online class from home. Due to Covid-19 pandemic circumstance, all physical activities of all individual stop. Because of work from home, online classes, online stage require advanced gadget use for a long time day by day coming about Multifactorial sickness of visual surface, i.e. Screen Vision Syndrome and a great many of individuals experience the ill effects of this infections. In the current way of life, each individual is getting influenced because of radiation might be because of VDT (Video show terminals), PC, T.V, Tablet and portable. Side effects are the most regularly happening medical conditions among VDT clients. The principle visual manifestations revealed by VDT clients incorporate 1) Redness of Eye, 2) Dry eyes, 3) Eye Strain, 4) Burning of Eye, 5) Headache, 6) Itching of Eye, 7) Neck, shoulder, or back agony, 8) Blurred Vision accordingly term the expression "Screen Vision Syndrome"(SVS) In present-day Science there is greasing up medication accessible has not explicit impact for long time impact on SVS.on this premise Ayurveda manages alteration in the way of life which is useful for the person to stay solid in this pandemic circumstance without the impact on there work. In this article, we have to take an audit of the various ayurvedic system and there a method of activity of that treatment. In this article as there is no name ailments CVS except for according to lakshan we can comprehend CVS from Ayuervedic writing. So the line of treatment is of Netragataroga Chikitsa-, Pindi, Shirodhara Aschotana, Seka, Prakshalana Bidalaka followed by Tarpana & Nasya with Vatapittahara Dravyas can likewise be given. Yogic eye practices loosen up eye muscles to lessen eye fatigue and build the endurance of eye muscles.

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### INTRODUCTION

"The preventions and treatment on it. Interventions by government. Awareness about the disease and pandemic. The data was collected from different websites, news, books and articles. Even after the disease become pandemic, many people are unknown with the facts, the severity of global health outbreaks, precautions to take and importance of intervention by the government as about quarantine and lockdown. This review study reaches up to all the facts regarding COVID-19, and it's pandemic

to spread more awareness (Chhapare and Bhutada, 2020)". "The coronavirus is a contagious disease which spreads from person to person through their respiratory droplets of an infected person after their coughing and sneezing. Healthy person could infect by coronavirus if people touch an object or surface with virus present from an infected person and then touch their mouth, nose or eyes. In some recent articles and reports, it is suggested that coronavirus can cause Conjunctivitis either as an early sign or during hospitalization during severe covid19. There are chances of spreading of coronavirus to eyes through aerosols or due to hands to eye contact. Covid19 patients have single-stranded RNA virus throughout the body and in the tears of eyes, but there is no evidence of coronavirus cultured in the conjunctiva of eyes. Conjunctiva congestion and follicular Conjunctivitis is found in patients having confirmed diagnosis of covid19" (Bhutada and Ingole, 2020). In this Corona period, the widespread outbreak of COVID-19 has led to the adoption of online teaching models by most schools, colleges, and coachings. All of them are now providing daily lectures with the help of online classes required computer or digital device(mobile), for prolonged periods of time There are many disadvantages of online classes and it is not possible to avoid it completely. Screen vision syndrome (SVS) is a strain on the eyes that happens when you use a digital device(mobile), for long periods (World Economic Forum, 2020). The prevention and treatment on it. Interventions by government. Awareness about the disease and pandemic. The data was collected from different websites, news, books and articles. Even after the disease become pandemic, many people are unknown with the facts, the severity of global health outbreaks, precautions to take and importance of intervention by the government as about quarantine and lock down. This review study reaches up to all the facts regarding COVID-19, and it's pandemic to spread more awareness (Chhapare and Bhutada, 2020). They may be viruses, bacteria or fungi. It may spread through breathing, talking, sneezing, coughing, etc. which generate droplets in the air. Dhoopana Chikitsa (medicinal fumigation) is one of the important faculties in Ayurvedic treatment (Gond and Bhutada, 2020).

Multifactorial disease of the ocular surface resulting from continuously focusing the eye on electronic display for 2 to 3 hrs or more pathophysiology loss of homeostasis of the tear film instability hyperosmolarity, neurosensory abnormalities convergence fatigue (Barabino *et al.*, 2012). Due to the online class, work from home, social media, the large no people use a digital device for a long

time period. "SVS/ CVS comprises of eye fatigue which is infrequently a worn-out muscle, migraines of pressure type, dry eyes which is because of lessening in flickering rate, obscured vision because of wrong zeroing in of picture on the retina, consuming eyes because of dryness, watering which is reflex lacrimation because of aggravation in the eye, redness as an indication of incendiary response in eye, and glare brought about by Screen (Bhutada *et al.*, 2018)". A healthy person has adequate resistance to infection. Infection is a successful invasion, establishment and growth of microorganism in the tissue of the host. The ability is hampered by poor nutritional status. Such a person falls an easy prey to infection frequently either in the form of cold, cough, marginal fever, a feeling of weakness and other minor complaints. Infection weakens the immune response of person the capacity of a creature to fight against infection white platelets is known as Immunity—a defence mechanism in the body. The body has two types of defence mechanisms specific and nonspecific. In Figure 1, (Acharya, 2003a) classification the Immunity in the two ways Specific & Non-Specific (Bhutada *et al.*, 2020).

Symptoms of computer vision syndrome in detail

1) Redness of Eye, 2) Dry eyes, 3) Eye Strain, 4) Burning of Eye, 5) Headache, 6) Itching of Eye, 7) Neck, shoulder, or back pain, 8) Blurred Vision (Skilling *et al.*, 2005).

In this way symptoms of CVS can be included in Vat – Pitta Pradhan dusti so Vat – Pitta dosha. Hence This is understood by a component called Samprapthi Gataka of Cvs As Bhutada *et al.* (2018) Stated

"Dushya:- Rasa, Raktha, Mamsa Dosha:- vatta pitta Vyadhi, Ama:- Jataragni and Dhatwagni Mandya Janya, Agni:- Jataragni, Rasa Dhatwagni, Raktha Dhatwagni Mamsa Dhatwagni, Srtodushti Prakara:- Atipravritti and vimagra gamana Sortas:- Bahya Srotas –Netra, Vyaktha sthana:- Netra, Vyadhi Prakara:- Sadhya, Vegavarodha and Netraroga."

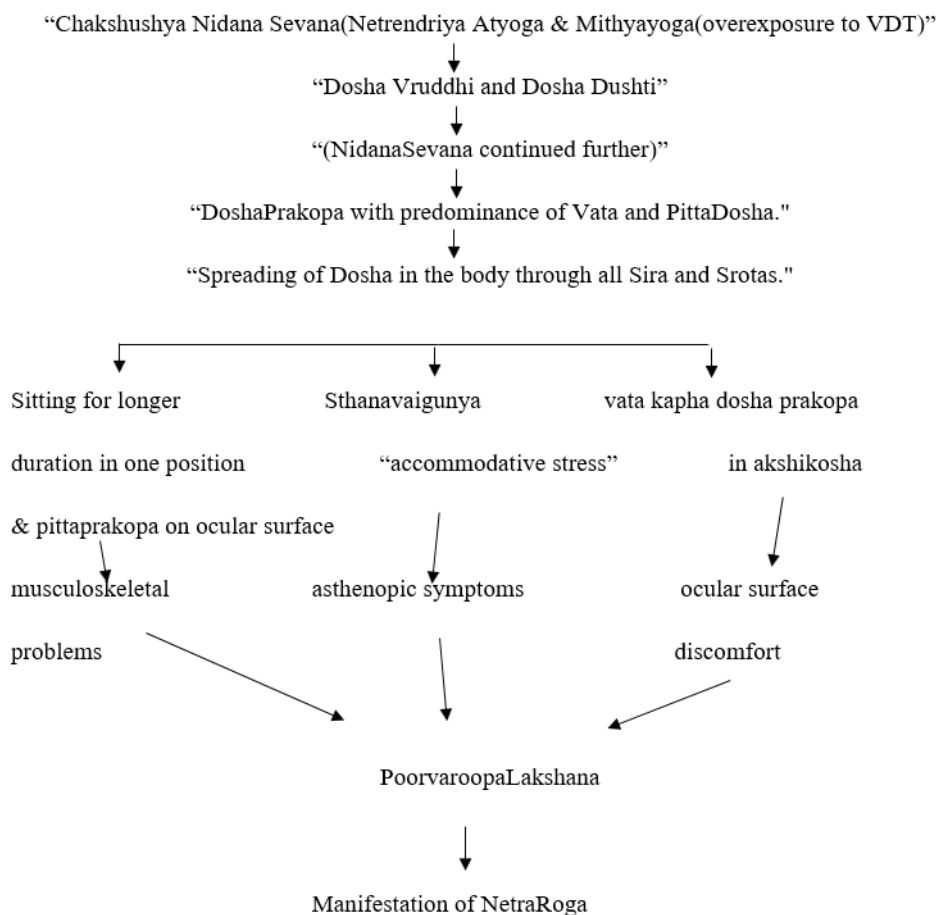
The following netragata vikruti are seen in the avarodh (suppression) of given vega (natural urges)

Adhovaata – Drushtivadha, Kshawathu – Shiro-ateendriya daurbalya, Jrumbha – as above, Nidra – Akshigaurav, Ashru – Akshiroga (Bhutada *et al.*, 2018).

### Strategies to deal with CVS

There are two strategies to deal with CVS which includes prevention and cure which are discussed as follows. Take the proper medicine to improve eye site like vitamin A

CVS can be cured by two ways A. Prevention B.Treatment (Kochhar, 2020).



**Figure 1: Illustration Showing the Scheme of Samprapti of CVS**

**Prevention**

1. Use proper lighting 2. Get a proper computer eye exam.,3. Adjust the brightness of the computer screen.,4. Minimize glare—5. Monitor Display Quality., 6. Blink more often., 7. Take frequent breaks. Follow the rule 20-20-20 take break after every 20 minutes look at something at least 20 feet away for 20 seconds (Bhutada, 2019).

**Treatment**

Most CVS symptoms are treatable after the correct eye vision examination & diagnosis.

Eye fatigue one of the most-watched CVS side effects generally results from a mix of helpless ergonomics imported work propensities or undetected visual conditions. Conceivable treatment incorporates having appropriate PC glass playing out an ergonomic change and going through conduct treatment. The migraines are one the significant manifestations of CVS however, can be brought about by an assortment of sources which ought to be confirmed first. On the off chance that it is PC related, at that point diminishing PC use, guaranteeing right review point, and keeping up a legitimate survey separation will lessen or wipe

out the headaches. General and PC glasses are the most probable answer for an obscured vision issue. Numerous components cause dry eyes; it is significant first to have a legitimate determination and ergonomic assessment to think about different likely explanations behind the issue. Treatment proposal includes squint much of the time and utilization of counterfeit tear. For neck and spinal pain, it is critical to get ordinary eye assessment to address act and to have a legitimate seat table and climate (Yan et al., 2008).

Ijipsr.com. 2020. [online] highlighted the treatment “1. Nidana Parivarjana is the first and chief Chikitsa in SVS /CVS. 2.Vaatadi Doshashama incorporates Sthanika and Sarvadehika treatment strategies like Shamana and Shodhana which incorporate Rasayana, Aushadha, Kriyakalpa, however the illness Computer Vision Syndrome isn’t referenced in Ayurveda Samhitas dependent on the standards the accompanying Chikitsa Siddhanta can be planned.

Nidana Parivarjana, Vaatadi Doshashama 3. In an Aganthu Karana Vyadhi like Computer/Screen Vision Syndrome Netra Prasadana Janana, Drushtiprasadajanana medications ought to be utilized which cause Dosha Shamana and Sam-



**Figure 2: Different Eye Exercise can give relief from CVS/SVS**

prapthiVighatana alongside Vaatabhishyanda Chikitsa with Netrya and Snigdha Vatahara drugs are valuable 4. Different Kriya - Kalpas which are beneficial in treating the SVS/CVS (Acharya, 2003b): a. Anjana (collyrium) - (Kasinath, 2012). b. Netra Prakshalana (Eyewash) - (Trikamji, 1994b). c. Akshitarpana - na (Prausnitz and Noonan, 1998) and (Sharma, 2007) d. Abhyanga an (Trikamji, 1994a) e. Seka - f. Bidalaka - (Santhosh, 2016). h. Nasya 5. Yoga:- (Pradipika, 2002b,a) 6. Trataka” (Upadhyay and Kumar, 2020).

7. Triphala kwath Eye Wash Triphala Kwath 5 g coarse powder is added to 16 parts of water, i.e., 80 ml, boiled and reduced to the 1/4th part 20 ml, and filtered using filter paper and this filter paper used to wash both eyes 8. Triphala/ MahaTriphala Ghrita orally - Triphala Ghrita or MahaTriphala Ghrita taking orally twice a day plays an important role to develop visual tissues.

9. Eye Exercise Eye exercises help the eyes in two important way as follows. Mechanically & Optically Figure 2 shows different Eye Exercise (Bhutada, 2019) and (Osborn, 2018). 10. Other Treatments

Upadhyay and Kumar (2020) states “Implications for monitor placement: Optimally, the computer

screen should be 16 to 21 degrees below eye level as measured from the centre of the screen and 20 to 28 inches from the eyes. Also, for every 20 minutes of computer viewing, look into the distance for 20 seconds to allow your eyes a chance to refocus (20-20-20 RULE- For every 20 minutes once, one should look at something kept 20ft away for 20 seconds) Blinking - To minimize your chances of developing dry eye when using a computer, make an effort to blink frequently. Blinking keeps the front surface of your eye moist. Regular eye examinations and proper viewing habits can help to prevent or reduce the development of the symptoms associated with Computer Vision Syndrome” (Taptagaporn *et al.*, 1995; Upadhyay and Kumar, 2020).

### Diet

#### Do's

Planning of diet is most important to boost immunity. As per many researches to provide supplementary food which contains Zinc, Vitamin C, Vitamin D and immunity-boosting food such as citrus natural products, custard apple, apple, papaya is among the Fruits. Vegetables include broccoli, onion, garlic and green leafy vegetables. Nuts, ginger, turmeric, pepper, egg yolk, shellfish, mushroom. The need of the

hour is a quick boost to the immune system to keep it fit, fighting. One should get the right amount of nutrients from the diet, supplementation regimen to boost the immune system (Bhutada *et al.*, 2020).

#### Don'ts

Avoid mental tensions, Avoid heavy, spicy food.

#### DISCUSSION

Bhutada *et al.* (2018) stated “. Aasatmya indriyarthasamyoga and pragyaparadhparinam are the three primary causative elements behind the pathogenesis, as per Ayurveda. Low separation of the screen from the eye, inappropriate room light, and low squinting rate are the principle causative variables; dryness of the eye, eye strain, redness of the eye, tingling, consuming impression of the eye, obscuring of picture, and migraine and neck/shoulder/back agony were the fundamental indications and grievance for the larger part of the patients. The infection isn't connected with a stubborn blunder, yet the power of signs and manifestations increment for those people with wrong or under a right headstrong mistake. Vata-pitta sharirikprakriti clients are the fundamental casualty of this sickness. Rajasika manasika prakriti people are more inclined to the illness. Youthful (18–30) taught grown-ups are the fundamental survivors of the illness” (Ramya, 2017). Roshna Sukhdeoji Bhutada stated about the diet “The role of Nutrition in Immune System is very important. Immune System acts as a defence mechanism against infection in two ways in the body, 1. specific 2. Non-specific. The curative role of the different element indicates systematically studied, planning, and taking a proper diet is necessary for tackling diseases. There is an important role of mineral & Vitamin as both are involved in immunity process. Zinc, Vitamin C & Vitamin D combined with AYUSH recommended measures regarding food menu to boost immune system should be included in the diet during Covid-19 pandemic. The Role of nutrition is to maintain and strengthen these defence mechanisms of the body to fight the invading germ. Ongoing research within this important field is urgently needed” (Bhutada *et al.*, 2020).

#### CONCLUSION

Presently a Day because of the Covid-19 pandemic circumstance. Numerous individuals are Working From the home. Understudy is additionally going to the online class from home. Due to Covid-19 pandemic circumstance, all physical action of all individual stops. Because of work from home, online

classes, online stage require advanced gadget use for a long time day by day coming about Multifactorial sickness of visual surface, i.e. Screen Vision Syndrome and a great many of individuals experience the ill effects of this infections. In the current way of life, each individual is getting influenced because of radiation might be because of VDT (Video show terminals), PC, T.V, Tablet and portable. Side effects are the most regularly happening medical conditions among VDT clients. The principle visual manifestations revealed by VDT clients incorporate 1) Redness of Eye, 2) Dry eyes, 3) Eye Strain 4) Burning of Eye 5) Headache 6) Itching of Eye 7) Neck, shoulder, or back agony 8) Blurred Vision accordingly term the expression “Screen Vision Syndrome”(SVS) In present-day Science there is greasing up medication accessible has not explicit impact for long time impact on SVS. on this premise Ayurveda manages alteration in the way of life which is useful for the person to stay solid in this pandemic circumstance without the impact on there work. In this article, we have take audit of various ayurvedic system & their method of activity of that treatment. In this article as there is no name ailments CVS except for according to lakshan we can comprehend CVS from Ayurvedic writing. Likewise, avoidance strategy to forestall CVS. In present-day medication no cures aside from oil Eye Drop, advising for reasonable PC use, PC glasses. So the line of treatment is of Netragataroga Chikitsa-, Pindi, Shirodhara Aschotana, Seka, Prakashalana Bidalaka followed by Tarpana & Nasya with Vata-pittahara Dravyas can likewise be given. Yogic eye practices loosen up eye muscles to lessen eye fatigue and build the endurance of eye muscles. Triphala/ MahaTriphala Ghrita orally twice a daily is useful in CVS. Also, immunity-boosting diet is a very important role in the prevention of CVS/SVS due to online activity in Covid-19 pandemic situation.

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#### Conflict of Interest

The authors declare that there is no conflict of interest for this study.

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