

COMPUTER VISION SYNDROME: AYURVEDIC APPROACH***Dr. Pranjali Deshmukh**

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Article Received on
04 Feb. 2020,

Revised on 24 Feb. 2020,
Accepted on 14 March 2020,

DOI: 10.20959/wjpr20204-17079

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ABSTRACT

Computer Vision Syndrome is the lifestyle disorder with prevalence in India is 69.3%. Computer Vision Syndrome, also referred to as Digital Eye Strain, describes a group of eye and vision related problems that result from prolonged computer, tablet, e-reader and cell phone use. Computer use is the demand in today's era and it's excessive use causes ocular and extra-ocular symptoms. Eye is the most important sense organ and it is important to protect our eyes from such lifestyle disorders. Therefore, it is aimed to study the Computer Vision Syndrome according to modern science and it's Causes, *samprapti*, *dosha* involvement and it's management according to *Ayurveda* for betterment of society.

KEYWORDS: Computer Vision Syndrome, *Samprapti*, *Dosha*.

INTRODUCTION

In the present era computer has become an important gadget for doing any type of work. Computer or any visual display terminals (VDTs) are an essential part of modern life. Now a days, office workers are demanded to do minimum 8 hour work per day which causes ocular hazards and other extra-ocular symptoms, this complex is named as Computer Vision Syndrome.

There is no direct references of Computer Vision Syndrome in *Ayurvedic Samhitas* but *Acharya Charaka* has mentioned that it is difficult to name every disease condition, there are innumerable diseases depending upon the *Vedana*, *varna*, *nidan*, *sthan*, *lakshana* and *nama*. As there is no direct reference of Computer Vision Syndrome in *Ayurveda* it can be considered as *Anukta vyadhi*.^[1] Here cause of the Computer Vision Syndrome is continues exposure to

computer screen and common reasons of eye diseases which leads to vitiation of *Vata* and *Pitta doshas* gradually which reaches up to the different parts of eyes and causes Computer Vision Syndrome.

Computer Vision Syndrome is a condition resulting from focusing the eyes on a computer or other visual display terminal for uninterrupted periods of time. Computer Vision Syndrome is not described in *Ayurvedic* texts but some symptoms can be correlated with *Shushkakshipaka*. Dry eye is the major symptom targeted in the therapy of Computer Vision Syndrome. The over the counter tear solutions can reduce the effect of dry eye in Computer Vision Syndrome.^[2]

Definition

According to American Optometric Association “Computer Vision Syndrome is defined as a complex of eye and vision problems related to the activities, which stress near vision and which are experienced in relation to or during use of computer”.^[3]

Causes of Computer Vision Syndrome are

- 1) Defective blinking such as low blink rate as seen in prolonged computer users’ result in dryness of eyes.
- 2) A glare on a computer screen which is too bright.
- 3) Improper viewing distance.
- 4) Inappropriate corrective lenses.
- 5) Improper sitting posture.
- 6) Combination of these factors causes Computer Vision Syndrome.

Symptoms of Computer Vision Syndrome are

Eye strain, Dry eyes, Blurred vision, Burning sensation in eyes, Double vision, Sensibility to light, Redness of eyes, Headache, Neck pain.

Management of Computer Vision Syndrome

- 1) To help to alleviate digital eye strain, follow 20-20-20 rule; take a 20 second break to view something 20 feet away every 20 minutes.
- 2) Viewing the computer – Optimally, the computer screen should be 15 to 20 degrees below eye.
- 3) Position the computer screen to avoid glare.

- 4) For Dry eye: Supplementation with tear substitutes (artificial tears)
- 5) Protective glasses.

Ayurvedic Approach

Nidana

Acharya Charaka has described 3 causes of *roga* of *Chakshurendriya* that is *Atiyoga*, *Hinayoga* and *Mithyayoda* of *Chakshurendriya*. With respect to Computer Vision Syndrome *Netraroga Nidan* are as below.^[4]

- *Atiyoga* – a) Seeing a bright object for a long time. b) Sitting in a same posture for a long period
- *Hinyoga* – a) Constant looking at very minute objects. (*Shukshmanirikshanat*)
- *Mithyayoga* - a) Viewing object from improper distance. b) Improper sitting position.

Samprapti

Continuous use of computer results in *Vata* and *Pitta dosha* vitiation. Vitiating *Doshas* reaches up to the upper portion of body and different *Avayava* of *Netra* through *Sira* and leads to various symptoms collectively known as Computer Vision Syndrome.^[5]

Symptoms of Computer Vision Syndrome can be correlated with *Shushkaakshipaka* from *Sarvagata netraroga*. *Sushkakshipaka* is a *Vata, pitta dosha* predominant *vyadhi*.

Rupa

According to Acharya Shushruta- *Kunita Ruksha Vartm* (Contraction of palpebral aperture due to photophobia), *Darun Ruksha Vartama* (The eye lids are stiff and dry), *Vilokane cha Aviladarshanam* (Blurred vision), *Sudarunamyatpratibodhane* (Opening of eye is difficult and painful). *Suskakshipaka* is characterized by difficulty in the eye lid movement and blurred vision due to excessive vitiation of *Vata-Pitta dosha*.^[6]

As per Vagbhatacharya it is characterised by, *Gharsh*(Foreign body sensation), *Toda* (Pricking Sensation), *Upadeha* (blurred vision), *Ruksha Darun Vartma* (Hard and rough Eyelids), *Kruchha Nimesh Unmesh* (difficulty in closing and opening eyelids), *Shushkata* (Dryness), *Shoola*(Pain).^[7]

Chikitsa

Nidanparivarjana and *Vatadi doshashamana* is the common treatment for all eye diseases.^[8]

Here we cannot avoid total computer work because it the bread and butter in today's industrial era. But we can reduce the time of working on computer. Also we should follow the rules to protect our eyes like 20-20-20 rule, protectives glass use etc. Use of *Ayurvedic shodhna karma* for *shodhna* and different *Kriyakalpa* are used for *sthanika dosha shaman*.

Snehapaan- Oral administration of *Gruta* or *Jeshtamadha siddha Gruta* is done.

Nasya – *Nasya* with *Anutaila*.

Tarpana and *Putapaka* – *Tarpana* with *Jeevniya Gana dravya siddha Gruta* or *Snigdha dravya*.

Parisheka – with milk mixed with *Saindhava*.

Aschyotana – *Majishthadi Siddha kwath* used for *Aschyotana*.

Anjana – *Sunth+Ghruta+Stanya* used for *Anjana*.^[9]

These treatment modalities help to reduce the eye strain, dry eyes and related complaints of Computer Vision Syndrome by *Vatadi doshashamana*.

DISCUSSION

Computer Vision syndrome is the lifestyle disorder which causes ocular and extra ocular symptoms due to excessive computer use. There is no direct reference of Computer vision Syndrome in *Ayurvedic* Texts and it is said to be as *Anukta Vyadhi*. The symptoms of computer Vision Syndrome can be correlated with *Shushkakshipaka Vyadhi* and it can be managed with different *ayurvedic* modalities which are *Vata Pitta shamaka*. The main symptom in this is dry eyes. *Sthanika kriyakalpa* with *Vata Pitta shamaka* and *snigdha dravya* helps to reduce dry eyes and other symptoms of Computer Vision Syndrome.

CONCLUSION

Computer Vision Syndrome is commonest among occupational hazards nowadays. According to *Ayurveda* it can be correlated with *Shushkakshipaka*. It causes *Vata* and *Pitta dosha* predominance in eyes. With the help of above mentioned *ayurvedic* treatment modalities Computer vision syndrome can be treated well. *Ayurveda* has the effective therapies to keep our eyes healthy. So, we can treat Computer Vision Syndrome by considering above *hetu*, *dosha* predominance, *samprapti*, *rupa* and *chikitsa* according to *Ayurveda*.

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