



Short Communication

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USE OF DIGITAL GADGETS LEADING TO THE COMPUTER VISION SYNDROME- A LETTER TO THE EDITOR

Sneha Pawar

sneha.pawar@dpu.edu.in

Abstract

Digital eye strain (DES) refers to the visual and ocular problems caused by continuous usage of digital electronic gadgets. It is characterized by dry eyes, itching, foreign body sensation, watering, blurred vision, and headache. Eye strain can cause non-ocular symptoms such as stiff neck, fatigue, headaches, and back pain. Prior to COVID-19, prevalence ranged from 5 to 65%. During the epidemic, lockdown restrictions limited outdoor activities for all age groups, and digital learning became the norm for nearly two years. While the prevalence of DES in youngsters increased to 50-60%, the symptoms broadened to include recent onset esotropia and vergence abnormalities. New-onset myopia and the development of pre-existing myopia have emerged as major eye health concerns. Education is another subject that has undergone a paradigm shift toward online implementation. Video conferencing services like Zoom and Google Meet have been used by schools, colleges, and institutions around the world, and digital devices have become the sole source of entertainment.

To prevent eye strain, management includes following correct ergonomics such as limiting average daily screen time, frequent blinking, enhancing lighting, eliminating glare, taking regular pauses from the screen, intermittently changing focus to a distance object, and adhering to the 20/20-20 rule. High-resolution screens, built-in antireflective coatings, matte-finished glass, edge-to-edge displays, and picture smoothing visual effects are all examples of innovations in this discipline.

A paradigm shift is essential in our understanding of DES from an etiological standpoint and to know the objective of this letter is to comprehend the risk factors.

Keywords: Digital. Myopia, Screen, Strain, Vision

Introduction.

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.

Viewing a computer or digital screen often causes the eyes to work harder. As a result, the distinct characteristics and high visual demands of computer and digital screen viewing predispose many people to developing vision-related illnesses. Uncorrected or under corrected vision impairments can contribute significantly to computer-related eyestrain. Even if you have an eyeglass or contact lens prescription, it may not be appropriate for the computer screen's viewing distances. Some people tilt their heads at weird angles because their glasses are not meant for staring at a computer, or they bend toward the screen to see it clearly. Their postures can result into spasms of muscle or pain in the neck, shoulder or back. The most common symptoms associated with CVS or digital eyestrain is: Eyestrain, Headaches. Blurred vision. Dry eyes, Neck and shoulder pain. Poor lighting, digital screen glare, improper viewing distances, poor seating posture, and uncorrected vision impairments can all contribute to these symptoms. Individuals' visual symptoms frequently depend on their visual ability and the amount of time spent looking at a digital screen. Uncorrected vision disorders such as farsightedness and astigmatism, poor eye focusing or coordination abilities, and age changes in the eyes, such as presbyopia, can all contribute to the development of visual symptoms while using a computer or digital screen device. Many of the visual problems experienced by users are transitory and will diminish after discontinuing computer activity or use. of the digital device. However, some people may continue to have diminished visual abilities, such as distorted distance vision, long after they cease working on a computer. If nothing is done to treat the underlying cause of the problem, the symptoms will persist and may worsen with future digital screen use.

Conclusion

The abrupt increase in screen and chair time has given rise to additional silent pandemics such as digital eye strain, myopia, musculoskeletal issues, obesity, and diabetes. The most significant risk factors for DES are more than four hours of digital device use per day, underlying refractive issues, feminine gender, and a history of dry eyes. There is an urgent need for eye care providers and visual health specialists to be knowledgeable about DES.

Awareness about the impacts of excessive screen time, ergonomic practices, and preventive actions must be communicated, particularly among teachers, students, and professionals exposed to excessive or prolonged screen time. Ergonomic practices and preventive measures should be promoted, particularly among teachers, children, and professionals who are exposed to excessive or prolonged screen usage. Future research should focus on understanding the risk factors for diverse groups, as well as the link between accommodative or binocular vision anomalies and DES.

Conflict of Interest- No any conflict of Interest

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