In the present age of scientific development and achievement, computers and digital devices have become an important part of our daily lives. Right from work, education to entertainment, we spend several hours gazing at the screens. However, this countless staring on the screens has led to emergence a new concern known as computer vision syndrome (CVS), a condition which is highly prevalent affecting millions of people worldwide. In this editorial, we will shed light on the causes, symptoms, and preventive measures of CVS, emphasizing the importance of safeguarding our eyes in the digital age.

Understanding Computer Vision Syndrome

Computer Vision Syndrome, also known as Digital Eye Strain, refers to a group of eye and vision-related problems resulting from the long-term use of digital interface. With the advent of sophisticated lifestyle, the increase in the use of digital appliances have such as smartphones, tablets, laptops, and desktop computers, have also increased. This has led to development of symptoms such as eye strain, dry eyes, blurred vision, headaches, and neck or shoulder pain. All of these have affected our productivity and have put a great impact on an individual's quality of life. A study conducted at the University of Khartoum, Sudan have reported 94% prevalence of CVS. Lema et al in their systematic review concluded that almost two in three individuals have CVS with high prevalence among women. A study from Nepal reported 89.4% prevalence of CVS. The study reported lack of preventive measure, working for longer period of time and inadequate screen viewing distance as major cause of CVS. The prevalence of CVS also increased during COVID-19. Additionally, studies suggest that CVS can worsen existing vision problems such as nearsightedness or astigmatism.

Contributing factors

Several factors contribute to the development of CVS. One primary factor is the constant need to focus and refocus our eyes while working on digital devices. Screens emit blue light, which is known to cause eye strain. Additionally, poor posture, improper screen viewing distance, improper and inadequate lighting, exacerbate the eye strain and affect related head and neck musculoskeletal system.

Collaboration with Technology

While technology can contribute to CVS, it can also provide solutions. Developers and manufacturers can integrate features like automatic blue light filters, eye tracking, and reminders for taking breaks into devices. Artificial Intelligence (AI) can aid in detecting early signs of CVS and provide personalized recommendations for mitigating symptoms.

Measures to mitigate the Computer Vision Syndrome

Optimize your workspace: Ensure proper lighting, adjust the screen’s brightness, contrast, and text size and position the screen at operator’s eye level and maintain an arm’s length distance to reduce strain on your eyes and neck.

Follow the 20-20-20 rule: Every 20 minutes, look away from the screen and focus on an object 20 feet away for at least 20 seconds. This exercise helps relax the eyes and reduces fatigue.

Blink frequently: Blinking moistens the eyes, preventing dryness and irritation. Remind yourself intentionally blink more often, especially during long periods of screen use.

Use computer glasses: Specialized glasses with anti-glare coatings and blue light filters can significantly reduce eye strain and filter out harmful blue light emissions. Minimize screen glare by adjusting room lighting. Many devices also offer built-in settings to reduce blue light emission during evening hours.

Take regular breaks: It is good to take frequent breaks from screen time to allow your eyes to rest and rejuvenate. Use these breaks to engage in activities that promote eye health, such as stretching or eye exercises. Eye exercises such as focusing on distant objects, rolling the eyes, or covering the eyes with palms strengthen eye muscles and relieve eye strain. Schedule routine eye examinations to detect any underlying vision issues and receive appropriate corrective measures.

Conclusion

Computer Vision Syndrome is a growing concern in our increasingly digital world. It has been time to prioritize our
eye health and take proactive measures to mitigate the effects of CVS. By adopting healthy viewing habits, optimizing our workspaces, and seeking technological aids like computer glasses, we can reduce eye strain and maintain long-term visual well-being. Remember, our eyes are irreplaceable, and safeguarding them from the potential harm of excessive screen use should be a priority. Let us embrace responsible screen habits, striking a balance between technology and our eye health, for a brighter and more visually comfortable future.

REFERENCES: