Eye Muscle Exercises; Solution to Rising Screen Exposure

Sir,

Rapid advancements in technology and its use throughout the globe among the population of all age groups have led to convenience and feasibility in day-to-day tasks. Along with the promptness and accessibility, they have also caused certain issues related to human health.[1] The main technology that has increased the cognitive load and also affected the visual system is the use of screen devices; which include cell phones, laptops, virtual reality and gaming devices, television screens, etc. Screen use among individuals of all age groups ranging from school-aged children to adults of all ages is growing rapidly.[2,3] In the recent decade, the use has escalated for the purpose of education as well as for the sake of playing various games. This extensive use leads to eye strain which can present as eye discomfort, blurred vision, fatigue, headaches and dry eyes. But in the context of the current global pandemic situation, it is compulsive to be a part of online and on-screen options to avoid any physical gathering and contact that can be hazardous to our health.[3]

Visual fatigue is ascribed as coordination or retinal fatigue. There is reduced visual acuity in retinal fatigue. Differences in the intensity of the objects to which the gaze has been pointed cause intensification of retinal fatigue. Problems with six extra-ocular muscles' neural control lead to coordination fatigue. Properly developed coordination between bilateral extra-ocular muscles and retina is essential to moving eyes.[1] Inefficient hardware and optics in screen devices is a cause of reduced synchronisation between both eyes, which can be perceived as discomforting headache and nausea. Visual fatigue can result from a mismatch between the perceived and actual depth as well as due to accommodation conflict.[3,4]

Eye muscle exercises can be helpful in this scenario as they can maintain the shape of eye muscles along with ensuring sufficient oxygen and nutrition supply to the eyes. These exercises may include blinking, palming, concentrated gaze, looking sideways and diagonally, rotational viewing, front along with sideways viewing, and nose tip gazing.

The correct sequence of these exercises can provide better results.[1] It is not possible to avoid the screen exposure and reduce the screen time, so it is suggested to maintain the regime of performing the respective exercises discussed above as they are helpful in reducing the eyestrain and can further enhance the overall cognitive performance as well as the quality of life. The exercises can be prescribed by a specialist and can be performed at home according to convenience.

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