

Transient Smartphone Blindness; “Jovial Darkness”

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ABSTRACT

A new phenomenon referred to as transient smartphone blindness (TSB) has emerged. This refers to temporary monocular vision loss associated with smartphone usage while lying down in the dark.¹ Digital-related eye strain affects people of all ages. We present a case of a perplex rarity recurrent transient, monocular visual impairment. It is caused by differential bleaching of the retinal pigment. Making the smartphone use sensibly is the only solution.

Keywords: Transient Smartphone Blindness (TSB), temporary monocular vision loss, digital eye strain

CASE REPORT

A 52 year old man reported with a 2 episodes of transient right monocular vision loss. He had been lying on his left side and glancing at his smartphone for 15-20 minutes. After switching the lights off, he was unable to see anything through his right eye. Both the time symptoms were during early morning hours. Patient noted sudden blacking out of vision in the right eye and followed by gradual return of normal vision within sometime. Patient was ruled out to have any neurological, ophthalmological or cerebrovascular disorder. No family history of similar complaints. Patient is a known hypertensive on anti-hypertensive medications.

Ophthalmological assessment included visual acuity (snellens chart), colour vision (Ishihara chart), contrast sensitivity (Pelli-robsons chart), pupillary responses, anterior segment, funduscopy and Optical coherence tomography (OCT). MRI was normal with other laboratory investigations to exclude infectious or inflammatory causes.

The patient developed visual symptom in the morning hours after looking at the blazing screens of their smartphones

for a significant period. He was eventually diagnosed to have transient smartphone monocular blindness (TSB) following careful history and ruling out other conditions, scrimping him of unnecessary drugs and interventions.

DISCUSSION

TSB was first appeared in the medical literature in 2016.² Smartphones has become a common item in today's society. TSB is a physiologic phenomenon related to differential retinal light sensitivity. Crucial factors that alleviate TSB include a low level of ambient light and body posture that result in use of monocular vision to view the smartphone. When a patient lies on one side, the ipsilateral eye becomes functionally occluded (e.g., by a pillow) and its retina maintains adaptation to the ambient light level or may become relatively dark-adapted.⁴ Meanwhile, the contralateral eye becomes light-adapted while it is used to view the smartphone, which illuminates the retina to a greater degree than ambient light. The symptoms appear to be due to differential bleaching of photo pigment with the discrepancy lasting up to several

minutes.³ This problem is new to medical science and is under investigation to explain the precise mechanism of the disorder. It should be included under the differential diagnosis of transient monocular blindness causes. Detailed history with use of smartphone only will give the diagnosis of TBS.

American Optometric Association (AOA) defines computer vision syndrome (CVS) as “Complex of eye and vision problems related to near work, which are experienced during or related to computer use”. Most studies indicate that Video Display Terminal (VDT) operators report more eye related problems than non-VDT office workers.⁵ CVS is a group of symptoms which crop up from the extended viewing of the VDT, when the demands of the task exceed the abilities of the viewer.

Hence, smart phone users are invariably exposed to the risk of developing TBS, leading to marked deterioration in performance in day to day life. With the responsible and realistic use of smartphone is the way to wipe out this disorder. Stop

taking care of your Smartphone better than yourselves and yes, use them smartly.

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