

**Libyan international medical university**



**Faculty of Basic Medical Science**

**Transient Smartphone Blindness**

**.Submitted by:** Omar Hussein Omar Al-magbary ( 1380 )

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**. Supervisor:** Fatma Al-tarhoni

## **Abstract:**

The transient smart phone blindness (TSB) is a relatively new phenomenon that affects vision. However it warrants immediate attention by the physicians and the smartphone users lest it lead to long-term consequences such as blindness. Is monocular vision loss a common clinical presentation and the cause is not always thromboembolic. Is ultimately harmless but unsettling to individuals who experience it. The best way to avoid this is to make sure that when you are plating with your phone in the dark keep both eyes on the smartphone screen. (1)

## **:Introduction**

In today's world, the smartphones have become a necessity, The ever-increasing number of the cell phone users in world, which includes a significant number of smartphone users. 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. The symptoms reported by the patients are usually contralateral to the side on which they were lying. Blockage of light due to lying down caused one eye to undergo dark adaptation while the other eye underwent light adaptation; this caused a temporary conflicting light adaptation between the two retinae. When the blockage of light was removed, the light-adapted eye underwent monocular vision loss.(2)

## **:Discussion**

**Alim-Marvasti.** presented 2 cases of a puzzling phenomenon of recurrent transient, monocular visual impairment. Through careful history taking, they found that these .cases were associated with cell phone use

In the first case, a 22-year-old woman presented with a several-month history of recurrent impaired vision in her right eye at night. She had an extensive ophthalmic .and systemic workup, and all findings were normal

The second case involved a 40-year-old woman with a 6-month history of recurrent monocular visual impairment upon waking that lasted up to 15 minutes. .Investigations for a vascular source were normal, and aspirin therapy was started

Both patient developed visual symptoms at night after looking at the bright screens of their smartphones for a long time. Their symptoms were not any neurological symptoms. There were no any risk factors, the clinical examination was normal, and we did not investigate them any further. They were advised to stop their medication and limit their smartphone usage at night

The mechanism of their visual loss was unclear, the authors hypothesize that transient unilateral blindness after using a smartphone at night is caused by differential bleaching of photopigment. However it is still unclear why only one eye is affected. (3)

### **Conclusion:**

Now, as smartphones are being used almost around the clock, manufacturers are producing screens with increase brightness for easier reading in varying light condition. Thus, the authors suggest that cases similar to those described here are likely to become more common. Detailed history-taking and an understanding of retinal physiology can reassure both patient and doctor, and reduce the number of costly investigation.(3)

### **:References**

<https://www.aao.org/eyenet/article/transient-smartphone-blindness-1>

**2-** Alim-Marvasti A, Bi W, Mahroo OA, Barbur JL, Plant GTN Engl J Med. 2016 Jun 23; 374(25):2502-4. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5741272/>

**3-** <https://www.nejm.org/doi/full/10.1056/nejmc1514294>