Zain Irfan Khatib, J Clin Exp Ophthalmol 2016, 7:9(Suppl)
http://dx.doi.org/10.4172/2155-9570.C1.048

Smartphone indirect ophthalmoscopy: Evolution and progress

Zain Irfan Khatib
Karnataka Institute of Medical Sciences, India

Smartphones, with their ever increasing popularity and the rapid advances in technology have made their way into ophthalmology as imaging devices for both anterior and posterior segment. Smartphone photography, by using various slit lamp adapters has already become quite popular in capturing anterior segment eye photographs. This presentation highlights the methods of using a smartphone for posterior segment photography. This is based on the principle of smartphone indirect ophthalmoscopy, where the flashlight of the phone is used as a coaxial light source to illuminate the patient's retina through a condensing lens (20 D), which can be visualized digitally and captured by the phone camera. This technique has been gaining popularity due to its rapidity and cost effectiveness in contrast to commercially available fundus cameras. However, the images obtained by the above method are not of a very good quality, and it is a difficult technique to master with a long learning curve. In order to overcome these drawbacks, a simple and cost effective adapter can be made, which can maximize the potential of smartphones to obtain better quality images. This presentation describes the evolution of smartphone ophthalmoscopy, right from its inception and shows how small modifications and newer technologies have helped in improving the outcome of this technique.

Biography

Zain Irfan Khatib is a currently a Postgraduate student in Ophthalmology working at Karnataka Institute of Medical Sciences. He has presented papers, posters and videos in various state and national level conferences in ophthalmology.

zainnoo@gmail.com

Notes: