# **Doctor Google, A Friendly Neighbour, or A Nosy Misleader?**

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## INTRODUCTION

The advent of the internet has been one of the most influential events in our lifetime, with over 5.35 billion Internet users worldwide.<sup>1</sup> As per the recent TRAI report on Indian telecom services performance indicators, India has a steadily increasing internet user base with 954.4 million active subscribers.<sup>2</sup> The smartphone revolution has ensured that even in rural India, almost 75% of households today have access to a mobile phone with the internet.<sup>3</sup>

Retinal detachment requires prompt diagnosis and early treatment to prevent significant visual morbidity. Management includes a plethora of options such as scleral buckling, pars plana vitrectomy (PPV), pneumatic retinopexy, or a combination of these techniques.<sup>4</sup> In this case report, we highlight the impact of social media on our patient and his management.

#### **Patient Details**

A 19-year-old, male presented to the outpatient clinic with complaints of defective vision in his right eye for 1-month. He sustained blunt trauma with a tennis racquet 1 year ago for which he was initially treated in a local hospital. The defective vision was insidious in onset and progressive. He has a history of wearing spectacles since the age of 10. There was no history of any other medical illnesses.

On examination, Visual acuity in the right eye was 6/24, with improvement using a pinhole to 6/18. Perception of light was normal and projection of rays was accurate in all quadrants. Intraocular pressure was 14 mm Hg. The conjunctiva was normal and the cornea was clear. The pupil was reacting to light and the lens was clear. Fundus examination revealed clear media. A temporal disc crescent was noted with distinct disc margins. The cup-disc ratio was 0.4 with normal vessels. Tessellations were present. There was a shallow supero-temporal retinal detachment extending from 8 o'clock to 1 o'clock with a retinal break visible at the 9 'o' clock position. A lattice degeneration with two atrophic

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holes was found at the 11 o'clock position (Fig. 1). There was no evidence of macular detachment.

Examination of the left eye revealed visual acuity of 6/18 with improvement using a pinhole to 6/12. The anterior segment was normal. Fundus examination was normal except for white without pressure area, which was present temporally from 2' o clock to 4' o clock associated with a lattice degeneration at 3' o clock position. Optical coherence tomography revealed a normal macula in both eyes (Fig. 2).

The patient and his parents were advised to undergo retinal reattachment surgery at the earliest, for which counseling was done and consent was taken for a Scleral buckling procedure

#### **Pre-operative Events**

On the day of surgery, the patient was severely anxious during pre-operative ward rounds, after which he was counseled and taken to the operating theatre. He was apprehensive but still cooperative for a peri-bulbar block. When the surgery was about to begin, the patient revealed that he had done an internet search on Scleral buckling procedures and watched many surgical videos of the same on YouTube. Following this, he developed anxiety regarding surgery. He had severe tachycardia with a pulse rate of 160 beats per minute and elevated blood pressure of 140/90 mmHg. There was associated trembling of hands and legs.

Surgery was deferred and the patient was given an eye patch. A physician's and psychiatric opinion were sought and 2D-ECHO showed normal sinus rhythm with a heart rate of

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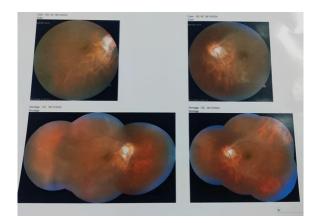


Fig. 1: Fundus photograph of right and left eye with montage view

72 beats per minute. He was diagnosed with acute stress and anxiety and was prescribed tablet clonazepam 0.5 mg with breathing and relaxation exercises.

Retinal detachment with attached macula should be operated at the earliest to prevent macular detachment and loss of central vision. Despite being counseled about the importance of surgery for improvement in vision, the patient wanted to avoid it due to unwanted and undesirable exposure to surgical videos on YouTube.

## DISCUSSION

YouTube is the largest internet video-sharing platform, with 2.70 billion users per month worldwide. India, with an estimated 476 million users, has the highest number of YouTube users in the world.<sup>5</sup> The increasing access to YouTube has resulted in a boom in its utilization to access health and

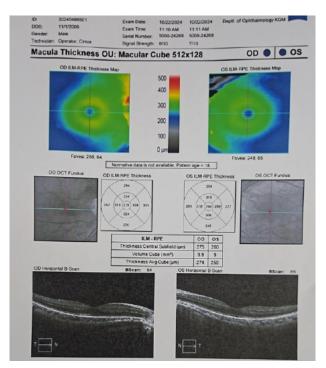


Fig. 2: Optical coherence tomography of right and left eye

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medical information. These young Generation Z individuals (GenZ or digital natives, between 12 to 28 years of age) are avid users and frequently seek information from these online platforms.

However, the major concerns with regard to information available on sites such as YouTube include the lack of peer review, questionable quality and poor reliability of such content. Farawana et al., in a systematic review, showed that the use of video-based media for patient education is beneficial in improving patients' knowledge, compliance to therapy and reducing anxiety.<sup>6</sup> However, the assurance of quality in open-source platforms such as YouTube is questionable. Sayin et al. studied the reliability of YouTube videos in-vitroretinal surgery using validated scoring systems such as the DISCERN score, JAMA score and Global Quality score (GQS) and showed 208 videos, of which 56 (26.9%) were uploaded by non-medical professionals, resulting in low quality and reliability. They emphasized the appropriate selection of content as a reference for vitreoretinal surgery.7 Songur et al. studied the reliability and usefulness of YouTube videos in retinal detachment surgery using similar scoring systems. Out of 87 videos, all of them were uploaded by ophthalmologists. About 46 videos were surgical and 41 were non-surgical videos. Though surgical videos were viewed less, their quality scores were higher than non-surgical videos. The DISCERN score was deemed to be moderate, whereas the JAMA score was assessed as low quality and the GQ scored as poor quality. The authors concluded that objective videos by qualified professionals with adequate information about all treatment options and complications will be beneficial as a source of patient information.8

## CONCLUSION

This is the first report of social media influencing the management of retinal detachment in our clinical setting. Judicious use of peer-reviewed surgical videos made by qualified professionals may prove to be a boon and may allay the patient's fears instead of aggravating them. However, unfiltered use of available information, especially surgical videos, may instill fear and promote anxiety. This is especially applicable to surgical videos showing tissue manipulation, bleeding, and incisions.

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35

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