ABSTRACT

Use of augmented reality in surgery

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As technology improves, we are increasingly incorporating it into our daily lives. This review aims to investigate the advantages and disadvantages of this growing reliance on technology in the medical field.

This paper will focus exclusively on augmented reality and how it can be used innovatively to improve patient care and outcome in ophthalmology. Performing ocular surgery is a very delicate process, and technology such as Google Glass, Oculus Rift and Microsoft Hololens could open up so opportunities in simplifying not only the surgeries themselves, but also ophthalmic training. Surgeons around the world have trialled some of these technologies in their operating theatres. This paper discusses whether inclusion of these technologies in an ophthalmic setting offers any advantages. We also investigate the learning curve associated with use, any potential risks to the user and cost-effectiveness of these technologies.