## The Apple of our Eyes!

Ophthalmology is a branch that has already been heavily dependent on gadgetry. Our tools for visualizing, diagnosing, and analyzing have undergone massive advancements. With these tools, our ability to enhance our diagnostic and treatment skills have radically improved. In this issue itself I have included a few articles that highlight the dependence on gadgetry in ophthalmic practice.

Ophthalmology practice can transform into a paperless process for the ophthalmologists, optometrists, and patients.

Mark Blumenkranz of the Stanford University School of Medicine gave a presentation at the Asia Pacific Academy of Ophthalmology (APAO), Sydney, 2011, wherein he outlined the electronic approach to testing visual acuity that he and his team had developed, using an iPhone. In a trial involving 50 participants, they measured the degree of correlation between distance and near vision testing when using the early treatment diabetic retinopathy study (ETDRS) charts and Rosenbaum cards under standard illumination, with those on a liquid crystal display (LCD) of a specially programmed iPhone. They found that of the 50 patients studied, there was a systematic slight overestimation of near visual acuity in both normal patients and patients with macular degeneration. They also found better readability with the LCD than on the printed cards.

The other goal of the Mark Blumenkranz research was to exploit similarities and differences between the testing systems for disease monitoring and therapeutic purposes. The only one that was statistically different between the two patient groups was in testing the red–blue variance. They found that patients with macular degeneration had a slightly poorer performance.

The iPhone 4 has 'RETINA DISPLAY' where the pixel density is so high that the human eye is not able to distinguish between individual pixels, giving an amazing clarity to the picture even after zooming the picture to the maximum. Apple products have enabled us to have easy portable devices for vision testing. One of the best features is to use the iPad as a low vision aid in patients with age-related macular degeneration, where the text can be enlarged, but yet maintains the quality of the characters and images.

Our upcoming Indian Journal of Ophthalmology (IJO) application from iTunes for the iPhone and iPad will also prove to be a boon for all tech savvy ophthalmologists. Hence, making the display enjoyable where an ophthalmologist can appreciate color contrast and sensitivity. This feature is a real visual treat!

Devices are available for home testing of Amsler and Preferential Hyperacuity Perimeter (PHP) [Fig. 1].<sup>[2]</sup> On a similar line, applications are available for free download such as the Amsler Grid, which aids us in our day-to-day practice to further every ophthalmologists need to diagnose at the earliest.

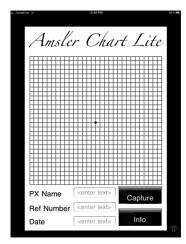
Other applications such as Ishihara chart are also available for the iPhone, which patients can use to monitor their progress [Fig. 2].

Making presentations has never been as easy as plugging in the iPhone and being able to access presentations at any place and anytime [Fig. 3].

Now there are Hospital-Specific Applications to make applications for Frequently Asked Questions (FAQ) and to check doctors' information at our fingertips. Moreover, only Apple and its technology has made this possible. Ibooks are a blessing for avid readers who are constantly on the go.

The sketch book enables us to explain conditions to patients and is an excellent teaching aid and patient education assistance.

We should utilize and take advantage of this technology, which is revolutionizing ophthalmology today.





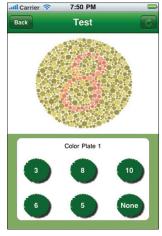


Figure 2: The Ishihara chart available for the iPhone







Figure 4: Eye Handbook featured smartphone utility for eyecare providers. Available from: www.eyehandbook.com

It began with the birth of an idea from a genius who sparked a new wave of technology.

Steven Paul Jobs, an entrepreneur, a visionary, and the founder of Apple Inc., battled pancreatic cancer — a disease that ultimately claimed him at the age of 56. The world lost a man who had revolutionized the digital world and the way we perceived the use of computers.

Influenced by a quote: "If you live each day as if it was your last, someday you'll most certainly be right," Steve Jobs adopted this principal and did exactly what he thought was important to him.

In his famous 2005 commencement speech to Stanford University, [3] Steve said:

"Death is the destination we all share, no one has ever escaped it. And that is as it should be, because death is very likely the single best invention of life.

Your time is limited, so don't waste it living someone else's life. Don't be trapped by dogma — which is living with the results of other people's thinking. Don't let the noise of others' opinions drown out your own inner voice. And most important, have the courage to follow your heart and intuition. They somehow already know what you truly want to become. Everything else is secondary.

The only way to do great work is to love what you do. If you haven't found it yet, keep looking. Don't settle. As with all matters of the heart, you'll know when you find it" [Fig. 4].

Steve Jobs teaches a valuable lesson to everyone the world over, not just ophthalmologists. He motivates us to chase our dreams and not settle for anything but the best.

Steve Jobs will live forever in our hearts due to his vision and constant innovation, which brought us life-changing and pathbreaking technology.

Steve you have done and dared to live your dreams, I wish every one of us does the same!!!

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