EDITORIAL

Blurry iPod

Adrian Bell, BSc, BAppSc (Optometry)
Caloundra, Queensland
Australia

"My iPod goes blurry after I have been working on my laptop." This was the presenting complaint of a 15-year-old a couple of weeks ago in my consulting room. With the advent of mobile phones, iPods, and laptops, more and more people are accessing information in a handheld format.

Behavioural optometrists are very interested in what people do with their eyes and vision. With the new generation, we can expect to see new issues developing as vision attempts to adapt to the changing requirements. We used to talk about the sustained attention required for reading and writing. Today's children have very different visual needs compared to the previous generation. They listen to music, chat on line, and watch videos all whilst researching the internet for school assignments. Everything they do is close, and this can continue for long periods of time. When offering advice, it may be useful to mention that clicking on a different website or using a different electronic device does not constitute a visual break.

Studies in the United States and Australia have shown a dramatic rise in the time spent accessing information in electronic formats. By 12 years of age, children on average spend over two hours per day watching television and over two hours on the computer. By 18, these times have increased by another two hours. If we add classroom time and the growing use of mobile phones, it is likely that concentrated indoor tasks account for a significant percentage of waking hours.

Government research in Australia identified that 40% of 3- to 4-year-olds used the home computer daily. Ninety percent of 15-year-olds have mobile phones and increasingly access the internet and social networking sites. Market research in the United States indicates that time spent on social networking sites has increased significantly in the last two years.

I used to watch children in my waiting room playing with a toy or flicking through a magazine. Now more typically they have a handheld electronic game and they assume the classic posture to play it with back arched and head down over the game. It is now possible to view a complete movie on a screen the size of a matchbox, and to do so requires a close working distance, resulting in increased accommodation and convergence. Even the children with supposed poor attention skills manage to play with these devices for considerable time.

The complaints people make when using computers and handheld devices have spawned the term Computer Vision Syndrome. It has almost become the norm for patients to experience headaches, blurry vision, or sore eyes when using these devices. These complaints are heard repeatedly in optometric and medical consulting rooms. Optometrists who have an understanding of the visual system and how it functions at near are well placed to diagnose issues and to assist the patient to be more comfortable and more efficient.

The 15-year-old mentioned earlier had a significant esophoria and was much more comfortable on the laptop using plus lenses. I prescribed a lens to be worn for study and discussed the idea of looking away from the computer on a regular basis. When I discussed reducing the use of the iPod for watching videos, she gave me a bewildered look. I compromised by suggesting she could use her glasses when using the iPod. I had prescribed my first iPod spectacles!

I have not forgotten our older patients; their needs are changing too. Near complaints are less likely to be confined to print size in the newspaper and books. Interestingly, older patients used to complain that they had trouble reading the subtitles on the television. Now many of them solve the problem by buying a large screen TV. The advent of larger computer screens has been seen in some circles as a way of solving difficulties with resolution of small print. However, the use of a larger screen causes more issues for older patients with regard to their eye movements and the use of incorrect lens form. Bifocals and standard multifocals often fall short in providing patients with ideal viewing conditions.

We need to remember that the older members of the community are also accessing information on the computer and small hand held devices. How often have you heard the comments "I have a new phone and it is so hard to read!" or "I've got a computer but I get a sore neck looking at it!" Obviously we need to talk with all our patients about their visual needs and the kinds of tasks they pursue. Prescribing appropriate lenses and giving advice on efficient use of the technology are two areas where functional optometrists can offer their patients significant help.

I trust that any new electronic devices you receive have large screens and clear fonts! If not, I can recommend an optometrist who can prescribe a great pair of glasses to help you to enjoy your new toy!