

Changing trends in myopia management in pediatric population

Dear Editor,

The global coronavirus pandemic contributed to a silent myopic pandemic and digital eye strain among children.^[1] Myopia is the most common refractive error worldwide, and the rise in its number of cases during the lockdown has also added to the global prevalence of myopia.^[2] Aside from conventional methods, the use of low-dose atropine in controlling myopia progression has been well documented. We read the interesting article by Li *et al.*^[3] on the effects of low-concentration atropine eye drops on the optical quality of the eyes in myopic children, and we must congratulate the authors on this innovative article. However, we have a few critical observations and suggestions to make that we believe will benefit all of our fellow ophthalmologists.

First, the authors have included children between 5 and 15 years of age and have performed tropicamide refraction in all the patients. As per conventional approach, cyclopentolate

is considered a better cycloplegic than tropicamide as children have a stronger accommodative effect. What was the reason for using tropicamide in their patient population?

Secondly, the authors have mentioned that the average age of all children was 9.43 ± 2.03 years in the methodology section. This statement we believe should be a part of the result section.

Thirdly, it will be interesting to know what the duration of the study was—a detail that is missing from the paper. Another interesting thing to observe is that all of the children underwent autorefractometry. Did the authors perform autorefractometry before cycloplegic refraction as well? As per our experience, in myopic children, autorefractometry sometimes overestimates the refractive correction, which can be faulty due to excessive accommodation during near fixation. Subjective refraction would be a better predictor of correct refractive error in children.

Lastly, the authors have considered various parameters to assess the optical quality in their patient population. What was the basis for taking these parameters into account? There are various simple parameters to assess optical quality in children like single binocular vision, contrast sensitivity, and so on.

Additionally, an important thing to be kept in mind while performing the optical quality assessment is that the ambient light should be low and manifest refraction should have been fully corrected to prevent inaccurate measurements.

Continued research has given birth to new treatment strategies in myopia management in children. The clinicians must be aware of all of the strategies such as single vision lenses, refractive under-correction, bifocal lenses, progressive additional lenses, MyoVision Lenses, defocus incorporated soft contact (DISC) lenses, MiSight contact lenses (CooperVision), rigid gas permeable contact lenses, orthokeratology, atropine, and pirenzepine.^[4,5]

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Conflicts of interest

There are no conflicts of interest.

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