on with the related study on this treatment mode. Thank you very much for your comments and discussion of the article.

Conflict of interest

The authors declare no conflict of interest.

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Sir,
Results of conservative management for consecutive esotropia after intermittent exotropia surgery

I read with interest the article by D W Kim *et al*[1] on conservative management for consecutive esotropia (ET) after intermittent exotropia (IXT) surgery.

The authors managed patients with full-time alternate occlusion and/or with a Fresnel prism. Immediate postoperative esodeviation from 8PD to 40PD, the authors used regular spectacles incorporated with a prism or prisms divided to each eye. In our hospital, we also use Fresnel prism to treat postoperative ET. According to our experience, consecutive ET that is ≥20PD after surgery, especially with factor of accommodation, is hard to achieve ocular alignment at 1-year follow-up. In addition, in this study, 19 patients had amblyopia preoperatively and 16 were in younger age stratum. ET may cause suppression, decreased visual acuity and amblyopia. As we all know, visual acuity will decrease with increasing prism power. However, in this paper, some patients wear prisms for several months without newly developed amblyopia. Why patients' visual acuity was not affected by prisms? Was a training program needed for amblyopia child?

Conflict of interest

The authors declare no conflict of interest.

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Sir,
Reply to 'Results of conservative management for consecutive esotropia after intermittent exotropia surgery'

We thank JJ Jiang and Q Wu for their interest in our study. They focus on the possible association of large overcorrection with poor prognosis and the prism's influence on visual acuity and amblyopia development.

For patients with persistent esodeviation months after occlusion therapy (average: 4.6 months, range: 0.5–12.0 months), we prescribed Fresnel prism, sometimes later changing to regular spectacles with prism(s). The average prism usage was 9.5 months (range: 1.5–24.0 months); at final follow-up, no patient still required it. We do not believe that large-angle overcorrection is associated with poor long-term ocular alignment: our four patients with immediate post-operative esodeviation ≥ 20 PD achieved ocular alignment within 6 PD of orthotropia by 1-year follow-up. As for accommodation, most of our subjects had myopia, not hyperopia. Fourteen eyes of 10 patients (6.7%) out of 149 of this patient group had preoperative spherical equivalent of ≥ +1.0 D. Among them, only one had immediate postoperative esodeviation over 20 PD, who became exotropic 3 weeks postoperatively with alternative occlusion therapy. There was one patient with small esophoria at distance and a larger esotropia at near; he was prescribed bifocal spectacles at 2 months follow-up, later showing orthotropia at 7 months follow-up without amblyopia development. Hwang *et al*[1] reported long-term conservative management outcomes for 68 patients with 20 PD or more initial overcorrection following exotropia surgery. They determined that in most patients, overcorrection had been reduced to 10 PD or less (distance and near) within 4 weeks.

Visual acuity reduction can be induced by Wafer prisms, Fresnel trial set prisms, and conventional prisms; however, the effect is negligible with prism powers <12 PD.[2] All of the prisms we used had powers of ≤12 PD, and we believe that there was no substantial visual acuity deterioration or, therefore, any significant potential for prism-related amblyopia development. At the final follow-up, among the 19 patients who had preoperative amblyopia, none demonstrated a BCVA below 20/30. Neither was there

any case of new-onset amblyopia. Hwang and Lee,[3] correspondingly, reported no cases of new-onset amblyopia among 110 consecutive esotropia patients managed with prismatic correction.

Conflict of interest

The authors declare no conflict of interest.

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Sir,
Comment on 'The Eye Phone Study: reliability and accuracy of assessing Snellen visual acuity using smartphone technology'

I read with interest the article 'The eye phone study: reliability and accuracy of assessing Snellen visual acuity using smartphone technology'.[1] Even though the results are interesting, I have a few concerns and comments. I do not agree with authors that Snellen chart is engrained into physicians worldwide as the 'standard' of measuring visual acuity (VA). In fact, international standardization describe chart design recommendations such as line size progression, number of letters per line, and so on.[2,3] The Snellen chart fails a lot of these recommendations, therefore professionals should consider to use standardized charts previously validated as the ETDRS, the new gold standard in clinical practice.[4]

I am not sure why authors use the equation of Figure 1, which is reflected in their paper. This would give a correct result if the tangent had been computed in degrees but not in radians how they denote by the '*c*' letter. I believe that would be better to use an equation derived from the standard definition of VA.

VA is the inverse of the minimal angle which subtend the detail of an optotype in minutes of arc (α'). Optotype size (h) is computed by means of replacing the VA in the equation (1) by the Snellen ratio with the consideration that the optotype is built based on a grid of five times the detail ($h/5$).

$$VA = \frac{1}{\alpha'}; \quad \tan(60\text{ś}\alpha') = \frac{h/5}{d}; \quad h = 5 \cdot d \cdot \tan\left(\frac{1}{60 \cdot VA}\right) \qquad (1)$$

Equation (1) is the derived equation from the standard definition of VA for computing the optotype size.

I find it very interesting that authors found only 3 of 11 applications that had a measured optotype size within the 10% of necessary dimensions. This is probably because developers have not drawn vector optotypes by means of programming language and they have designed a bitmap image scaled depending on the size of the screen. In fact, I have tried 'Snellen' app on an iPhone 6 and the error rate is around 14% and not 4.4% as on iPhone 4.

To develop 'responsive visual acuity apps' adapted to all screens is not complicated with tablets or mobile phones if the developer draws a vector optotype that changes with the pixels per inch retrieved from the device. Mobile phones are not the best option for testing vision at distance, tablet devices have higher field of view that offers the possibility to increase presentation distance to minimize accommodation. Another advantage of tablet and mobile devices is the possibility to develop automated tests that will improve the reproducibility of the current charts.[5]

Conflict of interest

The author declares no conflict of interest.

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