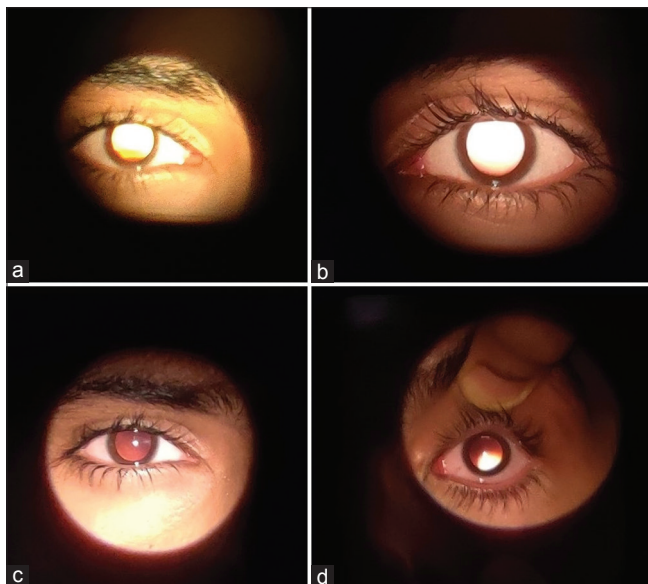


## Response to comments on: Using Brückner's test for gross keratometry screening

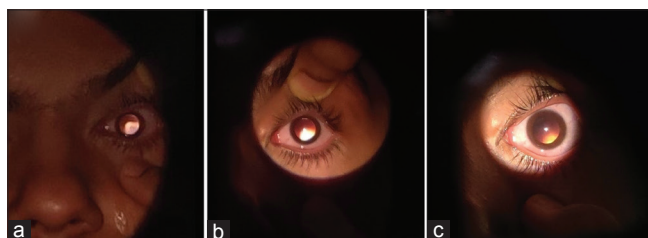
Sir,

I would like to thank the authors for their interest and comments on the article "Using Brückner's test for gross keratometry screening"<sup>[1,2]</sup> and address their queries as follows.

The points addressed by you, in your letter, have already been proven by us (regarding Bruckner's test can be performed with any coaxial illumination source, it is seen in the dilated pupil, inversion of crescents using indirect ophthalmoscope).<sup>[3]</sup> But I partially disagree with the fact that direct ophthalmoscope is better than indirect, for Bruckner's test for crescents. Firstly, I believe that it is the distance between the illumination and visualization systems that determines the quality of formation of crescents,<sup>[3]</sup> which is more in indirect ophthalmoscope than in direct and thus enables better crescents in case of



**Figure 1:** Comparison of Bruckner's test with direct (a) right eye, (b) left eye vs indirect ophthalmoscope (c) right eye, (d) left eye in a 22-year-old male who is emmetropic in the right eye and +4D hyperopic in the left eye. This clearly demonstrates indirect ophthalmoscope being superior



**Figure 2:** Indirect ophthalmoscopy Bruckner's test being done in the left eye of the same above patient at 1 m (a), 50 cm (b), 20 cm (c). These three images show qualitative and quantitative differences in crescents for the same refractive error

indirect ophthalmoscope [Fig. 1]. Secondly, the quality and dimension of crescents can vary depending on the distance at which the test is being performed (like retinoscopy). Hence, distance at which the test is done can be changed to enable better visualization of earlier not so well-defined crescents (example as in Fig. 2). Thirdly, though I agree pupil dilation is a must to see crescents in indirect ophthalmoscope, dilation with cycloplegia is the only way to unmask latent hyperopes, who usually accommodate to avoid themselves from manifesting any refractive error. This might be missed if the Bruckner test is done with direct ophthalmoscope without any pupillary dilation/cycloplegia.

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### Conflicts of interest

There are no conflicts of interest.

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## References

1. Bhayana AA. Using brückner's test for gross keratometry screening. *Indian J Ophthalmol* 2019;67:1175.
2. Kothari M, Jahan S, Solanki M. Comments on: Using Brückner's test for gross keratometry screening. *Indian J Ophthalmol* 2020;68:262.
3. Bhayana AA, Prasad P, Azad SV. Refractive errors and the red reflex- Bruckner test revisited. *Indian J Ophthalmol* 2019;67:1381-2.

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