

## Night-vision tests for evaluating visual performance

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Dear Editor,

We have carefully read the article entitled “Quantitative evaluation of night vision and correlation of refractive and topographical parameters with glare after orthokeratology” by T Kojima et al. [1], and we agree that is a worthwhile study of night-vision disturbances that arise in certain surgical or nonsurgical techniques of emmetropization, such as orthokeratology (OK). The evaluation of night-vision disturbances is a crucial point, and any test which provides quantitative parameters would be essential to avoid problems that arise with subjective questionnaires.

We must indicate that the device used for the night-vision test by Kojima et al. is similar to one proposed previously by different authors [2–8] and checked successfully. Figure 1 of the study by T Kojima et al., showing the night-vision test that a patient will see, is very similar to the Figure 2 in the paper [2] where we described the device used by us to evaluate night-vision disturbances. A white LED central light source is also located at the centre of the board, and different stimuli along radial lines are used to be detected by the patient. Of course, some other minor questions make the two tests different, but the essential idea is the same. We have used this test to check different situations and surgical techniques, as Kojima et al. [1] propose. Cataract and refractive surgery, evaluation of binocular vision after surgery, keratitis, and ARMD (age-

related macular degeneration) have been tested successfully with our test [2–7]. An updated version of our night-vision test can also be downloaded free ([www.ugr.es/local/labvisgr](http://www.ugr.es/local/labvisgr)) and installed in any computer to evaluate visual performance; this can help to extend the use of night-vision disturbance tests.

We agree with the authors that evaluating visual performance in relation to night-vision difficulties is of paramount interest, and it can be useful for a large variety of vision disorders. Of course, we also agree that scattering of the light is very important. Although both visual tests take into account that the effect of scattering will affect the visual performance of the patients performing the test, neither of the tests provides an objective measurement of scattering. This is why other devices are necessary to investigate the correlation between objective data and visual tests [8].

In their final paragraph, the authors claim that an aberrometric analysis of OK could be of interest. In this sense, we wish to indicate that this study has been done in our lab [9], and could complement the results reported by Kojima et al.

**Conflict of interest** Authors have no any conflict or interest with materials shown here.

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