Response to comments on: Changes in pattern electroretinogram after application of 0.01% atropine eye drops

Dear Sir,

We are thankful to Jethani *et al.*^[1] for their interest in our paper.^[2] The reason for their "inability" to detect the changes in the pattern electroretinogram (PERG) following the instillations of 0.01% atropine eye drops may be due to a simple explanation.

Skin electrodes, used by Jethani *et al.*, measure more than 100 μ v and pick up more neural noise. The machine then processes the signal by complex averaging of the signals changing the actual result. DTL electrodes, used by us, are applied to the eye and capture very small and noise-free electrical signals ranging from just 1.0 μ v to 20 μ v. We caution the clinicians against the use of skin electrodes in obtaining the PERG, which is against the ISCEV standards.^[3] The results obtained using different electrodes on different machines are not comparable.

The PERG changes with 0.01% atropine eye drops reported by us were real. However, it was an experimental condition where 4 drops of 0.01% atropine were applied in succession. It is possible that when only one drop of 0.01% atropine eye drops is applied once at night, no predictable changes might be recorded on PERG.^[4]

Financial support and sponsorship Nil.

Conflicts of interest

There are no conflicts of interest.

Mihir Kothari, Deepak Bhat, Nitu Khadse, Rishika Jain, Vivek Rathod

Jyotirmay Eye Clinic, Mumbai, Maharashtra, India

Correspondence to: Dr. Mihir Kothari, Jyotirmay Eye Clinic, 104, 105 Kaalika Tower, Kolbad Road, Khopat, Thane West - 400 601, Maharashtra, India. E-mail: drmihirkothari@gmail.com

References

- Jethani J, Memon S. Comments on: Changes in pattern electroretinogram after application of 0.01% atropine eye drops. Indian J Ophthalmol 2020;68:259-61.
- Kothari M, Bhat D, Khadse N, Jain R, Rathod V, Aru P. Changes in pattern electroretinogram after application of 0.01% atropine eye drops. Indian J Ophthalmol 2019;67:309-10.
- Bach M, Brigell MG, Hawlina M, Holder GE, Johnson MA, McCulloch DL, et al. ISCEV standard AQ6 for clinical pattern electroretinography (PERG): 2012 update. Doc Ophthalmol 2013;126:1-7.
- Anders LM, Heinrich SP, Lagrèze WA, Joachimsen L. Little effect of 0.01% atropine eye drops as used in myopia prevention on the pattern electroretinogram. Doc Ophthalmol 2019;138:85-95.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code:	Website:
	www.ijo.in
	DOI: 10.4103/ijo.IJO_2086_19

Cite this article as: Kothari M, Bhat D, Khadse N, Jain R, Rathod V. Response to comments on: Changes in pattern electroretinogram after application of 0.01% atropine eye drops. Indian J Ophthalmol 2020;68:261. © 2019 Indian Journal of Ophthalmology | Published by Wolters Kluwer - Medknow