

Erratum

In the article entitled, "Time course of retinal degeneration associated with the absence of 1, 4, 5-inositol trisphosphate receptor in *Drosophila melanogaster*" by O Vazquez-Martinez, A Lorcanca, L Palma-Tirado, S Wischin-Fuentes, M Villalobos-Leal, A Antaramian, J Riesgo-Escovar, R Hernandez-Munoz and M Diaz-Munoz, which was published in the March, 2010 Issue of *Experimental Biology and Medicine* (Vol 235:365-372, 2010), please note the following corrections. The authors apologize for the errors.

Throughout the manuscript the term "DroIP3R" should be changed for "itpr".

ABSTRACT

Page 1, end of line 5

Original:

"The synaptic transmission and membrane potential of retinal cells were also significantly distorted; showing reduced on and off transients as well as membrane potential from day 10 of hatching..."

New:

"Comparison between electroretinograms recorded in wild type and mutant tissues showed progressive differences in the on and off transients as well as in the magnitude of the summed receptor potentials of photoreceptor cells from day 5 of hatching..."

MATERIALS AND METHODS

Page 2, Experimental and control groups, line 1

Original:

"Mosaics were generated by the expression of the gene eyeflp (yweyflp; FRT82 armlacZ/TM6, Ubx) in the mutant flies donated by Dr. Raghu."

New:

"For mosaic analysis, the allele l(3)itpr90B.0 was placed on a homologous chromosome bearing FRT sites (9)."

Page 2, Experimental and control groups, line 6

Original:

"We expressed the mosaic using FRT90IP3RB0 stock obtained from Dr. Raghu mating with a yweyflp; FRT82 armlacZ/TM6, Ubx stock (13, 14)."

New:

"Homozygous mutant ommatidia were detected by absence of a red-eye marker (w+) in a w- background following the strategy already reported (13, 14)."

RESULTS

Page 3, Time course of electroretinogram disruption, 2nd paragraph

Add at the beginning of the paragraph:

"Nevertheless the direct comparison between the pigmented and non-pigmented ommatidia in the mosaic flies is not straightforward, some of the differences detected in the wild type and the itpr-deficient ommatidia are worth to point out."

Page 3, Time course of electroretinogram disruption, 2nd paragraph, line 11

Original:

"In contrast, the electroretinograms obtained in control flies expressing IP3R but without pigment did not show any significant changes from day 1 to 45 after hatching (arrows in panels A-C). Taken together, the electrophysiological results indicate that the lack of IP3R is compensated during the first 10 days by an unknown adaptive mechanism; however, after ~day 15 the function of the photoreceptors and their synaptic contacts deteriorate progressively, culminating in a much altered electroretinogram after day 30."

New:

"In contrast, the electroretinograms obtained in control flies expressing IP3R but without pigment showed higher values in these parameters, especially in the ON transient and the magnitude of the summed receptor potentials of photoreceptor cells. Hence, these data indicate that mosaic flies showed altered electroretinograms since hatching in both, wild type and mutant tissues, supporting the hypothesis of a propagated damage from the cells lacking the IP3R."

DISCUSSION

Page 7, Temporal integration, Phase 1, line 2

Original:

"...indicating an altered membrane potential and synaptic activity..."

New:

"...indicating a more accentuated degenerative process in the cells lacking the IP3R..."

Page 7, Temporal integration, Phase 1, line 12

Original:

"Remarkably, increased episodes of lipoperoxidative and caspase 3 activities were detected during the first week of eclosion, suggesting that functional and structural defects were preceded by enhanced pro-oxidant reactions as well as an activated program of cell death"

New:

"Increased episodes of lipoperoxidative and caspase 3 activities were detected in the wild type and mutant tissues since the first week of eclosion, suggesting that the onset of the biochemical alteration associated to the lack of IP3R started very early and that was also rapidly propagated to the wild type cells."

DOI: 10.1258/ebm.2010.010r01