OPEN PEER REVIEW REPORT 1

Name of journal: Neural Regeneration Research

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Title: Time-course pattern of neuronal death and gliosis in gerbil hippocampi induced by mild,

severe and lethal transient global cerebral ischemia

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COMMENTS TO AUTHORS

In the present manuscript, the authors analysed the effect of transient cerebral ischemia (5, 15 and 20 min) in the neuronal death in the hippocampus. The authors selected the gerbils as animal model due to the fact that frecuently they do not have the posterior communicating artery. Therefore is a good model of forebrain ischemia after the ligation of both inner carotid arteries. The authors described the effect of mild, severe and lethal ischemia into the different components of the hippocampus after 1, 2 and 5 days of survival.

I have some minor concerns with the actual version of the manuscript:

- 1. Table 1: I believe that this table is not necessary. The result described in the text is clear enough.
- 2. SMA experiment: The results obtained are no discussed at all. It would be interesting that the author give an explanation to this phenomenon.
- 3. The results obtained in the hippocampal analysis is clear, the lethal group is described as dead after 2 days. Could the authors show the data of this group at least after1 day? This could be shown as supplemental matherial.
- 4. Text suggestions:

Pag. 1 line 14. substitute "...from 4 days..." to "...after 4 days..."

Pag. 2 line 16. substitute "...die from several..." to "---die several..."

Pag. 4 line 1. substitute "...1h form 24h after..." to "...1h, 24h after..."

Pag. 10 line 8. substitute "...telencephalon may be lethal..." after "...telencephalon is lethal..."

Pag. 11 line 4. The authors refer to three groups. Which groups do they refer? ischemic groups? collection days groups?

References: The Park references are disorganized, they do not follow a chronological order.