Review of: "Impending role of hippocampal neurogenesis in the development of chronic epilepsy following seizures after Kainic acid and Pentylenetetrazol treatment"

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Potential competing interests: No potential competing interests to declare.

In this study, Sharma and colleagues investigated the role of hippocampal neurogenesis in epileptogenesis after KA-induced SE and PTZ-induced kindling. The study appears carefully designed and executed, and the results confirm our understanding that SE-induced neurodegeneration (not seizures) and gliosis leads to epileptogenesis and chronic seizures. Here are some general and specific comments that I hope can help the authors to improve their manuscript:

1. In the Methods section, more detailed information is needed about the purposes of the different histological experiments and how they were carried out.
2. Results:

- Detailed results regarding SRS after KA and PTZ need to be presented, at least in text.
- Figure legends need to be significantly beefed up with a more detailed description of results and statistics.
- Fig. 1: It will be helpful to add a quantified plot (e.g., bar graphs) in addition to the images. What do the arrows indicate? This should be explained in the legend. Also, it will be helpful to clearly mark the subregions of the hippocampus.
- Figs 2&3: It will be helpful to add images in addition to bar graphs.
- Figs 4&5 should be combined into one fig instead of two. It will be helpful to add arrows to indicate the newborn neurons.

1. In Results (2nd paragraph, page 4), the authors stated that the dentate gyrus is more susceptible to KA-induced neurodegeneration, which seems to contradict many of the previous studies showing the hilus and CA3 are the most vulnerable regions (e.g., Buckmaster and Dudek, 1997). Any explanation?