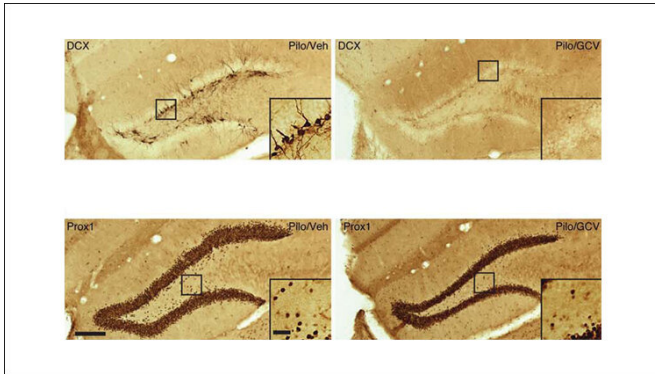


Reducing seizures by removing newborn neurons

15 July 2019



More information: Targeting Seizure-Induced Neurogenesis in a Clinically-Relevant Time-Period Leads to Transient but Not Persistent Seizure Reduction, *JNeurosci* (2019). DOI: [10.1523/JNEUROSCI.0920-19.2019](https://doi.org/10.1523/JNEUROSCI.0920-19.2019)

Provided by Society for Neuroscience

Removal of newborn neurons (right) Credit: Varma et al., *JNeurosci* 2019

Removing new neurons born after a brain injury reduces seizures in mice, according to new research in *JNeurosci*. This approach could potentially help prevent post-injury epilepsy.

New neurons generated following a [brain injury](#) often do not develop normally. Left untreated, these cells may contribute to the development of epilepsy.

Jenny Hsieh and colleagues at the University of Texas at San Antonio continually removed [new neurons](#) that formed during the eight weeks following a seizure in [mice](#). Hsieh's team monitored seizure activity in the mice and observed that the treated mice experienced a 65 percent reduction in seizures compared to the untreated mice. This effect required more than four weeks of continuous treatment.

Although these findings support a role for newborn neurons in epilepsy development, they also suggest additional factors are involved. Further research may bring us closer to complete prevention of injury-induced epilepsy.

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