

عنوان مقاله:

Generation of motor neurons from human amygdala-derived neural stem-like cells

محل انتشار:

مجله علوم پایه پزشکی ایران، دوره 21، شماره 11 (سال: 1397)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Sepideh Ghasemi - *Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran*

Hadi Aligholi - *Department of Neuroscience, School of Advanced Medical Sciences and Technologies, Shiraz University of Medical Sciences, Shiraz, Iran*

Pir Hossain Koulivand - *Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran*

Maryam Jafaraian - *Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran*

Hassan Hosseini Ravandi - *Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran*

Maryam Khaleghi Ghadiri - *Department of Neurosurgery, Westfälische Wilhelms-Universität Münster, Münster, Germany*

Ali Gorji - *Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran*

خلاصه مقاله:

Objective(s): Among several cell sources, adult human neural stem/progenitor cells (hNS/PCs) have been considered outstanding cells for performing mechanistic studies in in vitro and in vivo models of neurological disorders as well as for potential utility in cell-based therapeutic approaches. Previous studies addressed the isolation and culture of hNS/PCs from human neocortical and hippocampal tissues. However, little data are available on hNS/PCs obtained from the adult human amygdala. Materials and Methods: The present study explored the capacity of the amygdala harvested from resected brain tissues of patients with medically refractory epilepsy to generate neurosphere-like bodies and motor neuron-like cells. Results: Although the proliferation process was slow, a considerable amount of cells was obtained after the 3rd passage. In addition, the cells could generate motor neuron-like cells under appropriate culture conditions. Conclusion: Isolation and culture of these cells enable us to improve our knowledge of the role of the amygdala in some neurological and psychological disorders and provide a novel source for therapeutic cell transplantation.

کلمات کلیدی:

Brain, Hippocampus, Intractable epilepsy, Motor Neuron, Neural stem cells

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1295202>



