

1
Name of journal: *World Journal of Stem Cells*

ESPS Manuscript NO: 12930

Columns: REVIEW

Stem cell therapy in intracerebral hemorrhage rat model

Marcos F Cordeiro, Ana P Horn

Abstract

Intracerebral hemorrhage (ICH) is a very complex pathology, with many different not fully elucidated etiologies and prognostics. It is the most severe subtype of stroke, with high mortality and morbidity rates. Unfortunately, despite the numerous promising preclinical assays including neuroprotective, anti-hypertensive, and anti-inflammatory drugs, to this moment only symptomatic treatments are available, motivating the search for new alternatives. In this context, stem cell therapy emerged as a promising tool. However, more than a decade has passed, and there is still much to be learned not only about stem cells, but also about ICH itself, and how these two pieces come together. To date, rats have been the most widely used animal model in this research field, and there is much more to be learned from and about them. In this review, we first summarize ICH epidemiology, risk factors, and pathophysiology. We then present different methods utilized to induce ICH in rats, and examine how accurately they represent the human disease. Next, we discuss the different types of stem cells used in previous ICH studies, also taking into account the tested transplantation sites. Finally, we summarize

Match Overview

1	Internet 21 words crawled on 29-Nov-2014 www.wjgnet.com	<1%
2	CrossCheck 17 words Roelandt, Philip R., Valerie D. Roobrouck, and Catherine Verfaillie. "Multipotent Adult Progenitor Cells", Handbook o	<1%
3	CrossCheck 11 words Majumder, Kaustav, Subhadeep Chakrabarti, Sandra T. Davidge, and Jianping Wu. "Structure and Activity Study of Egg	<1%
4	CrossCheck 10 words Maekawa, Momoko, Kei Yamaguchi, Tomonori Nakamura, Ran Shibukawa, Ikumi Kodanaka, Tomoko Ichisaka, Yoshif	<1%
5	Internet 10 words crawled on 18-Nov-2008 askdoctorjoshua.com	<1%
6	CrossCheck 9 words Ghodsizad, Ali, Arjang Ruhparwar, Viktor Bordel, Ebrahim Mirsaidighazi, Hans Michael Klein, Michael M Koerner, Matt	<1%
7	CrossCheck 8 words Kuroda, Yasumasa, Shohei Wakao, Masaaki Kitada, Toru Murakami, Makoto Nojima, and Mari Dezawa. "Isolation, C...	<1%
8	CrossCheck 7 words S. Wakao. "Multilineage-differentiating stress-enduring (Muse) cells are a primary source of induced pluripotent stem ...	<1%