Accepted Manuscript

Title: Bumetanide Reduce the Seizure Susceptibility Induced by Pentylenetetrazol via Inhibition of Aberrant Hippocampal Neurogenesis in Neonatal Rats after Hypoxia-Ischemia

Authors: Jiang-jian Hu, Xing-liang Yang, Wen-di Luo, Song Han, Jun Yin, Wan-hong Liu, Xiao-Hua He, Bi-Wen Peng

PII: S0361-9230(16)30387-2
DOI: http://dx.doi.org/doi:10.1016/j.brainresbull.2017.01.022
Reference: BRB 9162

To appear in: *Brain Research Bulletin*

Received date: 3-11-2016
Revised date: 26-1-2017
Accepted date: 27-1-2017

Please cite this article as: Jiang-jian Hu, Xing-liang Yang, Wen-di Luo, Song Han, Jun Yin, Wan-hong Liu, Xiao-Hua He, Bi-Wen Peng, Bumetanide Reduce the Seizure Susceptibility Induced by Pentylenetetrazol via Inhibition of Aberrant Hippocampal Neurogenesis in Neonatal Rats after Hypoxia-Ischemia, Brain Research Bulletin http://dx.doi.org/10.1016/j.brainresbull.2017.01.022

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Bumetanide Reduce the Seizure Susceptibility Induced by Pentylenetetrazol via Inhibition of Aberrant Hippocampal Neurogenesis in Neonatal Rats after Hypoxia-Ischemia

Hypoxia-Ischemia

Jiang-jian Hu[1],Xing-liang Yang[1],Wen-di Luo[1],Song Han[2], Jun Yin[2],
Wan-hong Liu[3], Xiao-Hua He[2], and Bi-Wen Peng[1*]

1Department of Physiology, Hubei Provincial Key Laboratory of Developmentally OriginatedDisorder, School of Basic Medical Sciences, Wuhan University, Wuhan, Hubei, China

2Department of Pathophysiology, Hubei Provincial Key Laboratory of Developmentally OriginatedDisorder, School of Basic Medical Sciences, Wuhan University, Wuhan, Hubei, China

3 Department of Immunology, School of Basic Medical Sciences, Wuhan University, Wuhan, Hubei, China

Highlight

- The expression of NKCC1 is increased after hypoxia-ischemia
- Bumetanide restores the ectopia of granule cells in hippocampus
- Bumetanide reduces the PTZ induced seizure susceptibility in hypoxia-ischemia neonatal rats
- Bumetanide restores the aberrant neurogenesis associated hippocampal memory and recognition

Abstract

Hypoxia-ischemia brain damage (HIBD) is one of prevalent causes of neonatal

Download English Version:

https://daneshyari.com/en/article/5736378

Download Persian Version:

https://daneshyari.com/article/5736378

Daneshyari.com