Author's Accepted Manuscript

Effects of macrophage migration inhibitory factor on cardiac reperfusion injury in mice with depression induced by constant-darkness

Lu-yuan Tao, Ming-yuan Huang, Saroj-Thapa, Jiao-ni Wang, Shao-ze Wu, Fei He, Kai-yu Huang, Yang-jing Xue, Lingwei-Jin, Lian-Ming Liao, Ji-fei Tang, Kang-ting Ji



PII: S0165-0327(17)32146-8 DOI: https://doi.org/10.1016/j.jad.2017.12.039 Reference: JAD9447

To appear in: Journal of Affective Disorders

Received date:16 October 2017Revised date:18 December 2017Accepted date:26 December 2017

Cite this article as: Lu-yuan Tao, Ming-yuan Huang, Saroj-Thapa, Jiao-ni Wang, Shao-ze Wu, Fei He, Kai-yu Huang, Yang-jing Xue, Lingwei-Jin, Lian-Ming Liao, Ji-fei Tang and Kang-ting Ji, Effects of macrophage migration inhibitory factor on cardiac reperfusion injury in mice with depression induced by constantd a r k n e s s , *Journal of Affective Disorders*, https://doi.org/10.1016/j.jad.2017.12.039

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 galley proof before it is published in its final citable 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.

Effects of macrophage migration inhibitory factor on cardiac reperfusion injury in mice with depression induced by constant-darkness

Lu-yuan Tao^{a1}, Ming-yuan Huang^{a1}, Saroj-Thapa^a, Jiao-ni Wang^a, Shao-ze Wu^a, Fei He^a, Kai-yu Huang^a, Yang-jing Xue^a, Lingwei-Jin^b, Lian-Ming Liao^c, Ji-fei Tang^{a*}, Kang-ting Ji^{a*}

^aDepartment of Cardiology, Second Affiliated and Yuying Children's Hospital of Wenzhou Medical University, Wenzhou, Zhejiang, 325000, China ^bDepartment of Nephrology, Second Affiliated and Yuying Children's Hospital of Wenzhou Medical University, Wenzhou, Zhejiang, 325000, China ^cDepartment of Laboratory Medicine, Fujian Medical University Union Hospital, Fuzhou, Fujian, 350122, China

*Correspondence to Department of Cardiology, Second Affiliated Hospital and Yuying Children's Hospital of Wenzhou Medical University, Xueyuanxi Road, No 109, Wenzhou, 325000, Zhejiang, China.Tel: 86-577-88002214; Fax: 86-577-88002214 *Correspondence to Kang-ting Ji, MD, Department of Cardiology, Second Affiliated Hospital and Yuying Children's Hospital of Wenzhou Medical University, Xueyuanxi Road, No 109, Wenzhou, 325000, Zhejiang, China.Tel: 86-577-88002214; Fax: 86-577-88002214

jiftang@126.com jikt@wzmc.edu.cn

ABSTRACT

Rationale

Depression is associated with coronary artery disease and increases adverse outcomes and mortality in patients with acute myocardial infarction, but the underlying pathophysiological mechanisms remain unclear.

Objective

To evaluate the effect of macrophage migration inhibitory factor (MIF) on cardiac ischemia-reperfusion (I/R) injury in mice with constant darkness-induced depression. **Methods and Results**

Twenty C57BL/6 mice (8 weeks old, male) were randomly divided into 2 groups: one group was housed in a 12 h light/dark cycle environment (LD) and the other in a constant darkness environment (DD). After 3 weeks, constant darkness-exposed (DD) mice displayed depression-like behavior as indicated by increased immobility in the forced swim test (FST) and lower sucrose preference rate. Western blotting revealed cardiac MIF expression was significantly lower in the DD mice than that in the LD mice. Next, 84 mice were randomly divided into 4 groups: LD sham group, LD I/R

¹ These two authors contributed equally to this work.

Download English Version:

https://daneshyari.com/en/article/8815749

Download Persian Version:

https://daneshyari.com/article/8815749

Daneshyari.com