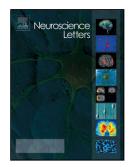
Accepted Manuscript

Title: The effect of amitriptyline administration on pain-related behaviors in morphine-dependent rats: hypoalgesia or hyperalgesia?



Authors: Esmaeil Akbari, Ebrahim Mirzaei, Laleh Rezaee, Shahram Zarrabian, Abbas Haghparast

PII:	S0304-3940(18)30531-7
DOI:	https://doi.org/10.1016/j.neulet.2018.08.001
Reference:	NSL 33736
To appear in:	Neuroscience Letters
Received date:	23-12-2017
Revised date:	31-7-2018
Accepted date:	2-8-2018

Please cite this article as: Akbari E, Mirzaei E, Rezaee L, Zarrabian S, Haghparast A, The effect of amitriptyline administration on pain-related behaviors in morphine-dependent rats: hypoalgesia or hyperalgesia?, *Neuroscience Letters* (2018), https://doi.org/10.1016/j.neulet.2018.08.001

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

The effect of amitriptyline administration on pain-related behaviors in morphine-

dependent rats: hypoalgesia or hyperalgesia?

Esmaeil Akbari ^{a,b}, Ebrahim Mirzaei ^c, Laleh Rezaee ^d, Shahram Zarrabian ^e, Abbas

Haghparast ^{d,*}

- ^a Immunogenetic Research Center, School of Medicine, Mazandaran University of Medical Sciences, Sari, Iran
- ^b Department of Physiology and Pharmacology, School of Medicine, Mazandaran University of Medical Sciences, Sari, Iran
- ^c School of Pharmacy, Mazandaran University of Medical Sciences, Sari, Iran.
- ^d Neuroscience Research Center, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran
- ^e Cognitive and Neuroscience Research Center (CNRC), Tehran Medical Sciences Branch, Islamic Azad University, Tehran, Iran

Running title: Amitriptyline and Pain-related Behaviors

* Correspondence should be sent to:

Abbas Haghparast, PhD

Neuroscience Research Center

Shahid Beheshti University of Medical Sciences

P. O. Box: 19615-1178, Tehran, Iran

Tel & Fax: +98-21-2243-1624

Email: Haghparast@yahoo.com; Haghparast@sbmu.ac.ir

Research highlights

- Amitriptyline induced no antinociceptive effect in phase I of the formalin test in morphinedependent and morphine-naïve rats.
- In the interphase of the formalin test, amitriptyline induced pain suppression.
- In phase II of the formalin test, amitriptyline induced hypoalgesic effect on pain-related behaviors in morphine–naïve rats.
- In phase II of the formalin test, amitriptyline produced hyperalgesia at lower doses and hypoalgesia at higher doses in morphine-dependent rats.

Download English Version:

https://daneshyari.com/en/article/8841386

Download Persian Version:

https://daneshyari.com/article/8841386

Daneshyari.com