

Accepted Manuscript

Title: SLEEP DISORDER AND ALTERED LOCOMOTOR ACTIVITY AS BIOMARKERS OF THE PARKINSON'S DISEASE CHOLINOPATHY IN RAT

Authors: Jelena Ciric, Katarina Lazic, Slobodan Kapor, Milka Perovic, Jelena Petrovic, Vesna Pesic, Selma Kanazir, Jasna Saponjic



PII: S0166-4328(17)31239-1
DOI: <https://doi.org/10.1016/j.bbr.2017.11.021>
Reference: BBR 11180

To appear in: *Behavioural Brain Research*

Received date: 27-7-2017
Revised date: 7-9-2017
Accepted date: 16-11-2017

Please cite this article as: Ciric Jelena, Lazic Katarina, Kapor Slobodan, Perovic Milka, Petrovic Jelena, Pesic Vesna, Kanazir Selma, Saponjic Jasna. SLEEP DISORDER AND ALTERED LOCOMOTOR ACTIVITY AS BIOMARKERS OF THE PARKINSON'S DISEASE CHOLINOPATHY IN RAT. *Behavioural Brain Research* <https://doi.org/10.1016/j.bbr.2017.11.021>

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.

SLEEP DISORDER AND ALTERED LOCOMOTOR ACTIVITY AS BIOMARKERS OF THE PARKINSON'S DISEASE CHOLINOPATHY IN RAT

Running title: Biomarkers of Parkinson's disease cholinopathy in rat

Jelena Ciric^a, Katarina Lazic^a, Slobodan Kapor^{a,b}, Milka Perovic^a, Jelena Petrovic^a, Vesna Pestic^a, Selma Kanazir^a, Jasna Saponjic^{a,*}

^aUniversity of Belgrade, Department of Neurobiology, Institute for Biological Research - Sinisa Stankovic,

^bUniversity of Belgrade, Medical School, Belgrade, Serbia.

*Corresponding author

Jasna Saponjic, M.D., Ph.D. Research Professor University of Belgrade, Department of Neurobiology, Institute for Biological Research-Sinisa Stankovic, Despot Stefan Blvd. 142, 11060 Belgrade, Serbia Phone: + 381 11 2078426, Fax: + 381 11 2761433, e-mail: jasnasap@ibiss.bg.ac.rs, jasnasaponjic@yahoo.com

Highlights

- Hippocampal sleep disorder is the first and long-lasting hallmark of PD cholinopathy.
- High voltage sleep spindle dynamics during REM sleep reflects PD cholinopathy.
- Hypokinesia reflects impaired cholinergic impact in motor control regulatory network.
- Amphetamine induces hyperactivity in the hypokinetic rats with PD cholinopathy.
- Putamen c-Fos activity reflects re-organization of motor control in PD cholinopathy.

Abstract

In order to find out the possible earliest biomarkers of Parkinson's disease (PD) cholinopathy, we followed the impact of bilateral pedunculopontine tegmental nucleus (PPT)

Download English Version:

<https://daneshyari.com/en/article/8837963>

Download Persian Version:

<https://daneshyari.com/article/8837963>

[Daneshyari.com](https://daneshyari.com)