

Accepted Manuscript

Title: DAY/NIGHT MELATONIN CONTENT IN CEREBRAL PALSY

Authors: Janaina S. Santos, Celia M. Giacheti, Lilian S. Dornelas, Nathani C. Silva, Ana L.D.M. Souza, Leila M. Guissoni Campos, Luciana Pinato



PII: S0304-3940(18)30589-5
DOI: <https://doi.org/10.1016/j.neulet.2018.08.045>
Reference: NSL 33780

To appear in: *Neuroscience Letters*

Received date: 29-1-2018
Revised date: 30-7-2018
Accepted date: 28-8-2018

Please cite this article as: Santos JS, Giacheti CM, Dornelas LS, Silva NC, Souza ALDM, Guissoni Campos LM, Pinato L, DAY/NIGHT MELATONIN CONTENT IN CEREBRAL PALSY, *Neuroscience Letters* (2018), <https://doi.org/10.1016/j.neulet.2018.08.045>

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.

DAY/NIGHT MELATONIN CONTENT IN CEREBRAL PALSY

Running title: sleep disturbances and melatonin in Cerebral Palsy

Janaina S. Santos^{1,2}; Celia M. Giacheti²; Lilian S. Dornelas^{1,2}; Nathani C. Silva²; Ana L. D. M. Souza²; Leila M. Guissoni Campos³; Luciana Pinato².

1- Specialized Center for Rehabilitation, Sorri – Bauru-SP, Brazil.

2- São Paulo State University-UNESP - Marília, SP, Brazil

3- University of Marília–UNIMAR- Marília- SP, Brazil

Correspondence to Luciana Pinato. Address: Av. Hygino Muzzi Filho, 737, Mirante – Marília, São Paulo, Brasil. Phone: +55 14 3402-1324, email: lpinato@marilia.unesp.br

Total word count with legends and references:

Highlights

- ✓ 47% of cerebral palsy individuals had an indicative of sleep disorders
- ✓ Cerebral palsy individuals showed higher diurnal and lower nocturnal melatonin content than controls
- ✓ The lack of a day/night variation of melatonin content is related with sleep disorders in cerebral palsy individuals

ABSTRACT:

Changes in the sleep-wake cycle are frequent and may impair quality of life in individuals with cerebral palsy (CP). To investigate if a lack of a day/night variation of melatonin content could be related with sleep disorders (SD), the SD were evaluated with a Sleep Questionnaire and the melatonin content using ELISA in 33 individuals with CP and 24 controls. The indicative of SD were present in 47% of CP group, and the most frequent was the indicative of sleep breathing disorder. The CP group showed higher diurnal and lower nocturnal melatonin content than controls. Individuals with CP that had indicative of SD showed lower nocturnal content of melatonin than those without SD. These results showed that the lack of the day/night variation of melatonin was related to SD in individuals with CP.

Keywords: melatonin; sleep; neurodevelopment; behavior; cerebral palsy.

1. INTRODUCTION

Cerebral palsy (CP), defined as non-progressive brain injury caused by pre-, peri- or post-natal etiological factors in the developing brain, affects the functioning of individuals, resulting in permanent disorders of movement and posture at different levels [1]. In addition to

Download English Version:

<https://daneshyari.com/en/article/8965840>

Download Persian Version:

<https://daneshyari.com/article/8965840>

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