

July 12-13, 2018  
Paris, FranceTatiana P. R. Bachur<sup>4</sup> et al., J Neurol Neurosci 2018, Volume: 9  
DOI: 10.21767/2171-6625-C1-009

## SLEEP DISORDERS IN ALZHEIMER DISEASE

**Tatiana P. R. Bachur<sup>4</sup>, Gleiry Y. R. Cardoso<sup>1</sup>, Juliana C. Costa<sup>2</sup>,  
Matheus E. S. Lima<sup>3</sup>, Gislei F. Aragao<sup>5</sup>**

<sup>1</sup> Gleiry Y. R. Cardoso (State University of Ceará, BR)

<sup>2</sup> Juliana C. Costa (State University of Ceará, BR)

<sup>3</sup> Matheus E. S. Lima (State University of Ceará, BR)

<sup>4</sup> Tatiana P. R. Bachur (State University of Ceará, BR)

<sup>5</sup> Gislei F. Aragão (Federal University of Ceará, BR)

**S**leep disorders have a variable spectrum and are present in all forms of dementia, especially in Alzheimer's disease (AD). Elderly patients generally present with sleep disturbances, but this association is more frequent in patients with AD. The aim of this work was to perform a narrative review on the alterations in sleep that occur in patients with AD. A literature review was conducted using MEDLINE, LILACS, Web of Science, Scopus, Science Direct as databases and Alzheimer disease, sleep wake disorders, dyssonias as descriptors. It has been observed that sleep disorders are framed as one of the symptoms of AD, in addition to being related to physiological and genetic patterns. The main symptoms are getting up at night and waking up at night thinking it is day. The incidence of these symptoms was detected in patients with worse cognitive and functional status, lower socioeconomic status and depression. The relationship between insomnia, aggression, paranoid delusions and anxiety was observed. Recent studies have seek to clarify the etiology of sleep disorders, considering associations between absence of healthy sleep with greater deposition of amyloid load in brain regions such as angular gyration, frontal medial orbital cortex, cingulate gyrus and precuneus. Disorders of orexin levels in the cerebrospinal fluid in patients with AD were observed, promoting a change in the activation of the Wake-active monoaminergic system and the deactivation of the REM-on cholinergic groups, reducing sleep homeostasis. Lower body temperature at the end of the day causes disorders of the circadian rhythms in AD and a deficiency in the negative regulation of the proximal blood flow of the daytime skin has been found which may also affect the process. These researches initiate the development of new treatments, which will impact the patient's cognition and, consequently, their quality of life. We conclude, therefore, that the sleep disorders are one of the fundamental clinical aspects that must be evaluated in AD patients, specially due to its role as a prognostic changer for the disease.

### Biography

Tatiana Paschoalette Rodrigues Bachur is a Pharmacist, graduated from the Pharmaceutical Sciences Course of the Federal University of Ceará (UFC-1999) and has completed her Masters in Pathology from the Federal University of Ceará (UFC-2007). She is a Professor of the Medicine Course of the State University of Ceará - UECE, Brazil, Coordinator of specialization courses in the distance learning modality and collaborates in the Group of Studies in Neuroinflammation and Neurotoxicology – GENIT from UECE. She develops studies in Toxicology, Pharmacology and Tropical Diseases and is a reviewer of scientific journals and project leader.

tatiana.bachur@uece.br