



Simposio Internacional / *International Symposium*:

Patología del Sueño: de la Neurobiología a las manifestaciones sistémicas

Sleep disorders: from Neurobiology to Systemic Consequences

Madrid, 18 y 19 de enero de 2018 / *January 18-19, 2018*

ABSTRACT

Integrando la neurobiología del insomnio con el tratamiento cognitivo-conductual.

Nuevos métodos basados en modificación cognitivo-conductual

Towards an integration of the neurobiology of insomnia with CBT. New CBT-based treatment approaches

Sean Drummond

Monash Institute of Cognitive and Clinical Neurosciences, Monash University, Clayton, Australia

Insomnia is characterized by an inability to fall asleep, stay asleep, and/or waking too early unable to return to sleep. Importantly, insomnia also requires individuals to have daytime complaints they associate with their poor sleep. These complaints can manifest and cognitive problems (e.g., poor concentration or memory), emotional problems (e.g., irritability or depression) and/or behavioral problems (e.g., sleepiness interfering with driving or work function). In addition, many individuals with insomnia often have a hyper-focus on sleep difficulties and their consequences, thinking about these symptoms constantly and interpreting any difficulties are related to their insomnia. Thus, insomnia symptoms are present at night, during inactive wake (at rest or trying to fall asleep) and during the active waking day.

Recent research has attempted to understand the neurobiology (i.e., brain function) of insomnia, in order to better understand the disorder, its clinical presentation, and its treatment. This talk will cover recent work examining brain function during both active states (e.g., cognitive performance) and inactive states (i.e., quiet wake and sleep).

Despite consistent reports of cognitive problems, patients with insomnia show no reliable, consistent cognitive deficits relative to good sleepers. However, brain function does show characteristic differences from good sleepers. For example, individuals with insomnia show increased amygdala activation when viewing sleep-related pictures. This means their brains are having strong, negative emotional responses to sleep images, even stronger than to other non-sleep related images that usually elicit a negative response. Relatedly, those with insomnia show a general increase in activity within the Salience Network, a network of brain regions responsible for identifying and emotionally labelling experiences. This increased activity occurs not only in response to sleep-related images, but also to one's own heart beat (suggesting those with insomnia monitor their internal state more heavily) and during sleep itself (suggesting they may have more conscious awareness during sleep than someone without sleep problems).

*Todos los derechos de propiedad intelectual son del autor. Queda prohibida la reproducción total o parcial de la obra sin autorización expresa del autor.

© FUNDACIÓN RAMÓN ARECES. Todos los derechos reservados.

**All intellectual property rights belong to the author. Total or partial reproduction of the work without express permission of the author is forbidden. © FUNDACIÓN RAMÓN ARECES. All rights reserved.*