

3<sup>rd</sup> International Conference on

# NEUROPSYCHIATRY AND SLEEP MEDICINE

&

8<sup>th</sup> International Conference on

# NEUROLOGY AND BRAIN DISORDERS

September 21-22, 2018 | Philadelphia, USA

## Effects of repetitive transcranial magnetic stimulation (rTMS) in neuropsychiatry and sleep

**Adel Sayed Mahmoud Marei**  
Ain Shams University, USA

Sleep was defined by Abraham Maslow as one of the 5 basic physiological needs for survival. Sleep disorders are prevalent all over the globe. According to the World Health Organization (WHO), insomnia will affect more than 10% of the general population. Lately, it has been scientifically proven that disorders of sleep affect multiple body systems namely cardiovascular, hematological, endocrinal, digestive, immunity, body weight, and cognition. All these will contribute to lower the body's ability to regenerate and promote disease progression. rTMS is a diagnostic or therapeutic, external, noninvasive form of brain stimulation with relatively high safety levels that incorporates the use of the magnet causing stimulatory or inhibitory action potentials effects in brain tissue. These action potentials could be exhibited by motor actions in limbs when the corresponding brain motor area is stimulated. In 2008, rTMS was cleared by the Food and Drug Administration (FDA-USA) for drug-resistant Major Depressive Disorder (MDD). In the presentation, highlights regarding rTMS neurophysiology, neuroanatomical correlations and different parameters affecting good practice; in relation to neuropsychiatry and sleep disorders.

### Biography

Adel Sayed Mahmoud Marei has completed his bachelor degree in Medicine and Surgery (2004) and attained a Master Degree in Neuropsychiatry (2012) from ASU, Egypt. His passion was always to learn more. He shadowed Prof. Tarek Asaad (head of Neurophysiology unit, Institute of Psychiatry ASU) for over 2 years to become his successor in sleep medicine. Together they had performed over 400 cases in a period of 4 years with involvement in at least 6 research studies either directly or through training of candidates. Later into 2015, they were able to attain rTMS machine which serves 8-12 cases a day.

mareia@hss.edu

Notes: