







## Ottava Giornata della Ricerca della Svizzera Italiana Venerdì 9 marzo 2018

## Modulo per la sottomissione abstract di ricerca CLINICA

Titolo (massimo 15 parole)

A full sleep assessment in children with attention deficit hyperactivity disorders (ADHD)

Autori (cognome e iniziali, es: Grassi L.)

Miano S, Amato N, Manconi M

**Affiliazioni** (ospedale o istituto, servizio o reparto, indirizzo, es: Ospedale Regionale di Lugano, Servizio di angiologia, Lugano)

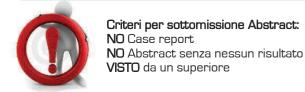
Sleep and Epilepsy Center, Neurocenter of Southern Switzerland, Lugano, Switzerland.

**Testo** (massimo **250 parole**, preferibilmente in italiano (accettato anche in inglese), suddiviso in Introduzione, *Metodi, Risultati, Conclusioni* e *Finanziamento* 

Introduction: We present the results of a prospective case-control sleep study in children with attention deficit hyperactivity disorder (ADHD), aimed to identify one of the following 5 sleep related phenotypes:1) narcolepsy-like; 2) sleep onset insomnia (SOI); 3) obstructive sleep apnea syndrome (OSA); 4) periodic limb movements (PLMs); and 5) sleep epilepsy, and to explore differences in sleep slow wave activity (SWA) distribution and sources, as compared to normal controls, by high density electroencephalography (HD-EEG). Methods: 30 consecutively recruited patients with ADHD underwent a battery of sleep questionnaires, a video-PSG-HD-EEG (256 channels), a multiple sleep latency test, and 1-week actigraphy, and 30 controls underwent a video-PSG-HD-EEG (256 channels). Results: The narcoleptic-like phenotype was found in 4 children, SOI in 5 children, OSA in 7 children, PLMs in 8 children, while sleep epilepsy in 5. All patients slept less 9 hours at actigrapy, confirmed by PSG, and had a higher apnea hypopnea index than controls. At scalp topography, both groups showed a similar distribution of SWA, but in ADHD subjects, the focus of SWA was over centro-parietal regions, whereas in control subjects it was prominent over frontal regions. The statistical non parametric comparison of localized sources showed a greater delta power over the posterior cingulates in ADHD group compared to controls. Conclusions: The study confirms the relevant association between ADHD and defined sleep disorders, inducing a chronic sleep deprivation. The HD-EEG analysis confirms a maturation delay of SWA, which may also reflect a state of sleep deprivation. Granted by ABREOC

Visto superiore (prego indicare Nome e Cognome del superiore)

Silvia Miano, Mauro Manconi



**Invio Abstract**