Clinical and sleep characteristics of patients with OSA and low respiratory arousal threshold: Aging and obesity

Carlos Alberto Viegas and Cesar Augusto Melo-Silva
University of Brasilia, Brazil

Introduction: Obstructive sleep apnea (OSA) is a serious and common disease with important cardiovascular and neurocognitive consequences. Despite of that, the treatment of OSA remains unsatisfactory because of inconsistent efficacy and variable adherence to existing therapies. So, to identify patients with low arousal threshold could help to find an alternative treatment using a more individualized therapeutic approach.

Objective: To identify clinical characteristics and polysomnographies of patients with OSA and low arousal threshold and the influence of obesity and aging.

Methods: We reviewed the baseline overnight polysomnograms performed between 2013 and 2014 in a private sleep laboratory. We included patients with OSA (AHI>5/h) and clinical predictors of low respiratory arousal threshold with age range between 30 and 60 years old. Were excluded patients with morbid obesity was (BMI≥40 Kg/m²). The total group was divided into three groups according the decades of age (30-39, 40-49 and 50-60 years old) and into two groups according to the BMI (25-29 and 30-39 Kg/m²).

Results: Were reviewed polysomnograms of 275 patients, 160 men. The average age and body mass index for the entire group were: 44.7±7.9 years (range 30-60) and 30.2±3.8 Kg/m² (range 25-39). The sleep characteristics were: SES=8.9±4.8 points (range 1-24); %N1 (% total sleep time)=3.7±2.3% (range 0.1-13.8); %N2 (% total sleep time)=70.2±10.2% (range 41.6-94.2); %N3 (% total sleep time)=7.9±6.1% (range 0.0-27.5); %REM (%total sleep time)=17.8±6.4% (range 2.5-36.0); arousal index (arousals/h of sleep)=16.0±9.0 (range 1.5-55.0); AHI (/hour)=12.4±6.5/hour (range 5.0-29.0); apneas (no.)=19.3±20.4 (range 0.0-113) and; hypopneas (no.)=58.7±35.8 (range 1.0-176); nadir SpO₂ (%)=84.4±2.7% (range 80-92). In none of the studied variables there was statistically significant difference (p>0.05) between obese and no obese patients and in the different decades of live.

Conclusion: The aging and the weight do not change the sleep characteristics of patients with OSA and low arousal threshold.

Sleep in Parkinson’s disease

Sonia Ancoli-Israel
University of California, USA

Parkinson's disease (PD) is a neurodegenerative disorder that is primarily characterized by motor dysfunction. Research has demonstrated however, that it is the non-motor symptoms (example cognitive deterioration and sleep) that are major cause of morbidity and mortality in this population. Sleep disturbances are the most reported non-motor symptoms in PD with prevalence reports of 60-98%. Sleep dysfunction has devastating impact on functioning, mood and quality of life. Such disturbances likely contribute to disease progression, severity and increase impact on both patient and the partner/caregiver. Sleep disorders common in PD include sleep disordered breathing (SDB), REM sleep behavior disorder (RBD), restless legs syndrome (RLS), periodic leg movements in sleep (PLMS), insomnia and excessive daytime sleepiness (EDS). This talk will review the sleep disorders common in PD.