عنوان مقاله:

Polysomnographic Findings between Obese and Non-Obese Pediatrics with Obstructive Sleep Apnea

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خلاصه مقاله:

Background: The prevalence of childhood obesity, which is associated with the health risk of OSA, is increasing. This study aimed to assess the polysomnographic findings of obese and non-obese children and adolescents with OSA.Methods: In this cohort retrospective study, all the obese and non-obese children and adolescents with OSA referring to Sleep Disorders Clinic, Qazvin Children Hospital, during ۲۰۱۴-۲۰۱۹ were included. The participants were ۵۲ pediatrics within the age range of ۱-۱۶ years old and mean age of ۶.۴۷±۳.۵۹ years, ۲۰ (۳۸.۵%) of whom were female and ۳۲ (۶۱.۵%) were male. The number of samples was determined according to previous studies, and the patients' case information was applied in this research. Obese children and adolescents were determined according to their BMI. PSG was performed for all the participants and its variables including sleep onset, sleep efficiency, sleep stages (N۱, N۲, N۳, rapid eye movement (REM)), arousal index (AI), apnea hypopnea index (AHI), mean arterial oxygen saturation (SaO۲), and total sleep time were determined and compared between the two groups.Results: Mann-Whitney test showed a statistically significant difference in the percentage of REM sleep stage between the obese and non-obese groups (P=۰.۰۱۷). There was no statistically significant difference in the other polysomnographic variables

between the two groups. In the obese group, linear regression showed significant correlation between body mass index (BMI) and AHI as well as mean arterial SaO۲.Conclusion: the percentage of REM sleep stage in the obese group with OSA was lower than that in the non-obese group. There was a correlation (P≤۰.۰۵) between obesity and respiratory events in sleep. It is predicted that with increasing age, obese people are more likely to have severe sleep .apnea

کلمات کلیدی:

(Adolescents, Children, Obesity, Obstructive sleep apnea (OSA), Polysomnography (PSG