

Gender difference in prevalence of obstructive sleep apnea in obese adolescents

by

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Introduction: Obstructive sleep apnea (OSA) is highly related to male gender in adult population.

Objectives: To determine the prevalence of OSA and possible correlations with body composition in male and female obese adolescents.

Methods: Forty-one post-pubertal obese adolescents (n=21 boys and n=20 girls), aged 16.05±1.76, with BMI>95th percentile of Centers for Disease Control and Prevention growth charts were submitted to a polysomnography, pletysmography and ultrasonography assessment before attending to a multidisciplinary therapy. The apnea-hypopnea index (AHI) was defined as the number of apneas and hypopneas per hour of sleep, and AHI≥5 was considered abnormal.

Results: The prevalence of OSA was 48.78% in this sample population (12.19% for girls and 36.56% for boys). The AHI was significantly higher in boys when compared with girls (12.34±11.64 vs 4.08±5.80, p<0.001). No significant differences were observed in mean values of sleep parameters, body mass, body mass index, subcutaneous and visceral fat for both genders. However, boys presented lower fat mass (43.99±5.66 vs 47.41±3.67% p<0.01) and higher fat free mass (56.018±5.66 vs 52.08±3.88%, p<0.001) when compared with girls.

Conclusions: As in adults, OSA seems to be more common in male than in female obese adolescents and no correlation with intra-abdominal visceral fat was found.

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