



[Pediatr Pulmonol.](#) 2006 Dec;41(12):1175-81. [Links](#)

## **Insulin and obstructive sleep apnea in obese Chinese children.**

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**OBJECTIVE:** In adults, obstructive sleep apnea (OSA) is associated with insulin resistance and dyslipidemia. We aimed to establish correlation between OSA, serum lipid profile, and insulin levels in obese snoring children. **METHODS:** Consecutive obese children with habitual snoring were recruited. They underwent physical examination, overnight polysomnography (PSG), and metabolic studies. OSA was diagnosed if apnea hypopnea index (AHI) > 1.0, and cases were considered to have moderate to severe OSA if AHI > 10. **RESULTS:** Ninety-four obese subjects with habitual snoring were studied. Seventy-three subjects were male and the median age of the studied group was 12.0 years (IQR 9.7-13.9). None of the subjects had active cardiopulmonary disease, and the BMI values of our subjects were >95th percentile using local reference charts. Sixty subjects had OSA, 47 being mild, and 13 being moderate to severe OSA. Multiple logistic regression analysis revealed that saturation nadir and insulin levels were significantly associated with OSA. **CONCLUSION:** OSA is prevalent among obese children with habitual snoring and insulin is independently associated with the condition. Its role in the cardiovascular complications of childhood sleep apnea is worthy of further exploration.

PMID: 17034061 [PubMed - indexed for MEDLINE]