Daytime sleepiness and hyperactivity in children with suspected sleep-disordered breathing.

Melendres MC, Lutz JM, Rubin ED, Marcus CL.

Eudowood Division of Pediatric Respiratory Sciences, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA.

OBJECTIVES: Excessive daytime sleepiness (EDS) is seen less frequently as a presenting complaint in children with sleep-disordered breathing than in adults. Instead, symptoms of hyperactivity are often described. We hypothesized that children with suspected sleep-disordered breathing (S-SDB) were both sleepier and more hyperactive than control subjects. Furthermore, we hypothesized that overnight polysomnographic parameters correlated with sleepiness and hyperactivity. METHODS: A cross-sectional study was conducted at a university-affiliated hospital and a community-based pediatric clinic. A total of 108 patients with S-SDB (mean [standard deviation] age: 7 +/- 4 years) and 72 control subjects (8 +/- 4 years) were recruited. A modified Epworth Sleepiness Scale (ESS) and the Conners Abbreviated Symptom Questionnaire were administered. Polysomnography was performed in patients with S-SDB. RESULTS: Patients with S-SDB had a higher ESS (8.1 +/- 4.9 vs 5.3 +/- 3.9) and a higher Conners score (12.8 +/- 7.6 vs 9.0 +/- 6.2) than control subjects. On the basis of adult criteria, 28% of patients had EDS. There was no difference in the ESS and Conners scores of patients with primary snoring and patients with obstructive sleep apnea. The ESS had weak correlations with polysomnographic parameters. CONCLUSIONS: Although the ESS score of children with S-SDB was within the normal range for adults, these children were sleepier and more hyperactive than control subjects. However, these data should be confirmed by a population-based study.

PMID: 15342852 [PubMed - indexed for MEDLINE]