Preliminary evidence of behavioral and cognitive sequelae of obstructive sleep apnea in children.

Lewin DS, Rosen RC, England SJ, Dahl RE.

University of Pittsburgh, Medical School, Western Psychiatric Institute and Clinic, E-704, 3811 O'Hara Street, Pittsburgh, PA 15213, USA. dlewin@speakeasy.net

OBJECTIVES: To characterize the daytime sequelae of obstructive sleep apnea (OSA) in children. BACKGROUND: OSA syndrome is a common disorder in children with estimates of prevalence ranging from 1.1 to 2.9%. Numerous studies have documented neuropsychological deficits in adults with OSA, although only a few preliminary studies have described these problems in children with OSA. METHODS: In the present study, otherwise healthy children with OSA (n=28), and a healthy age-matched comparison group (n=10) were assessed with standard measures of sleep, behavior, and cognitive function. RESULTS: Children with OSA had significantly more behavior problems than the healthy comparison group based on parents' reports (F=7.29, P<0.005). Children diagnosed with moderate to severe OSA had significantly lower scores on a timed cancellation task that assesses sustained attention (F=10.0, P<0.01). A significant association was found between OSA severity (rho=-86, P<0.01) and measures of verbal ability. CONCLUSIONS: These initial findings suggest that there are identifiable daytime sequelae of childhood OSA and that it is important to evaluate these daytime disturbances in making determinations about intervention.

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