Reviewer's report

Title: Parent-Rated Behavior Problems Associated with Overweight After Controlling for Sleep Disordered Breathing: A Prospective Study

Version: 1 Date: 21 July 2006

Reviewer: Judith Owens

Reviewer's report:

General
This study examines the important issue of the relationship among childhood obesity, sleep disordered breathing (SDB), and neurobehavioral deficits. The sample population was a group (N=402) of Caucasian and Hispanic children recruited from the community as part of a large study, the Tuscon Children's Assessment of Sleep Apnea, that included anthropometric measures, home polysomnography, a sleep questionnaire, behavioral inventories, and neurocognitive testing. This paper focuses on comparing parent reports of behavior previously identified to be associated with SDB (hyperactivity, inattention, etc) in those children who were identified as overweight (15%) with the normal weight children in the sample, controlling for the influence of SDB.

This is a well-written paper, with appropriate background presented. The use of a community sample that includes a substantial percentage of minority children is noteworthy. Study limitations are appropriately identified. The study contributes to our understanding of the complex relationship between SDB and behavior by highlighting the contribution that childhood obesity as a modifier may make to associated behavioral outcomes, and suggests that this contribution should be considered in future study designs.

Minor Essential Revisions
1) Although the general goals of the study are outlined in the Introduction, no specific hypotheses are included.
2) The current nomenclature classifies children according to BMI percentile as normal weight, at-risk for overweight, and overweight. The authors should use this updated classification.
3) Why was tonsillectomy an exclusion criteria?
4) Was parent education considered to be a proxy measure for SES?
5) The group differences on key demographic variables are listed; did the groups differ on severity of SDB (RDI)?
6) Why was a t-score of 65 selected as the cut-offs for Conner's and CBCL instead of the more conventional 60 (at risk) or 70 (clinical range)?
7) There was a substantial range of BMI’s in the sample; might the heaviest children have accounted for the greatest differences compared to normal weight children in behavioral measures? This needs to be addressed in the statistical analysis.

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests.