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Snoring predicts hyperactivity four years later.

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STUDY OBJECTIVES: Cross-sectional studies implicate snoring and sleep-disordered breathing as potential contributors to hyperactive behavior in some children. However, no prospective cohort study has demonstrated that symptoms of sleep-disordered breathing precede development of hyperactivity. **PARTICIPANTS:** Parents of 229 children aged 2 to 13 years, recruited at 2 general pediatrics clinics, completed initial and 4-year follow-up surveys. **MEASUREMENTS:** Surveys included a validated Pediatric Sleep Questionnaire about snoring, sleepiness, and overall risk of sleep-disordered breathing, and the hyperactivity index (expressed as a T-score) within the Conners' Parent Rating Scale. **RESULTS:** Thirty children (13%) were rated as hyperactive (hyperactivity index > 60) at follow-up. After adjustment for hyperactivity at baseline and stimulant use at follow-up, hyperactivity at follow-up was predicted by baseline habitual snoring (odds ratio = 4.4, 95% confidence interval [1.3, 14.7]) or loud snoring (4.5, [1.2, 17.5]) and by top-quartile composite scores for snoring (5.3, [1.7, 16.8]), sleepiness (3.0, [1.0, 9.4]), or sleep-disordered breathing (4.0, [1.4, 11.6]). **CONCLUSIONS:** This 4-year prospective cohort study shows that snoring and other symptoms of sleep-disordered breathing are strong risk factors for future emergence or exacerbation of hyperactive behavior. These findings support the hypothesis that untreated childhood sleep-disordered breathing contributes to development of hyperactivity.

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