

Changes in behavior and attentional capacity after adenotonsillectomy.

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The objective of this study was to quantify behavioral and attention capacity changes in children aged 4-11 y before and 3 mo after adenotonsillectomy (A/T). Overnight cardiorespiratory recordings were performed in 61 "behaviorally normal" children 1 wk before A/T. Tests of sustained attention using visual and auditory continuous performance tests (CPT) were completed by children 1 wk before and 3 mo after A/T. Behavioral Assessment Scales for Children (BASC) and a sleep questionnaire were completed by the parent/s at these same times. Results from overnight cardiorespiratory recordings showed that the children had mild sleep-related breathing disorders (SRBD) preoperatively with a mean apnea/hypopnea index of 3.0/h and a movement awakening index of 2.5/h. The majority had parent-perceived sleep and breathing difficulties that significantly improved post-A/T. BASC T scores for externalizing and internalizing behaviors improved post-A/T, e.g., behavioral symptom index mean pre-A/T was 56.2 (95% confidence interval, 52.8-59.6) compared with 50.9 (48.5-53.5) post-A/T. Some measures indicative of impulsivity and attentiveness obtained from the visual CPT before surgery, improved post-A/T, but no change was observed in any auditory CPT measures. Our data confirm improvements in subjective measures of sleep problems in children treated for SRBD and strengthen the notion of treating the disorder, not only related to the obvious clinical condition but also to the underlying sleep problems and adverse effects on daytime behavior and attention.