Revisits after adenotonsillectomy in children with sleep-disordered breathing

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Objective: This study investigated emergency room (ER) revisits and hospital readmissions following adenotonsillectomy (T&A) in children with sleep-disordered breathing (SDB). In particular, correlations between SDB severity and ER revisits were examined.

Methods: From 2009 to 2015, children (<18 y) with SDB who underwent T&A for treatment were enrolled. Disease severity was defined according to the apnea-hypopnea index (AHI) (primary snoring = AHI < 1; mild = AHI 1–5; moderate = AHI 5–10; and severe = AHI > 10). Revisit and readmission patterns within 30 days of the surgery were retrospectively extracted. Incidence rate, basic characteristics, and factors affecting revisits were analyzed.

Results: Of the 610 children (mean age = 7.2 y; males = 72%) who underwent T&A for treating SDB, 49 (8.0%) had first ER revisit, 9 (1.5%) had second ER revisits, and 1 (0.2%) had third ER revisits. Reasons for ER revisits were bleeding related (46%) or non-bleeding related (54%). The timing for revisits was 6.9 ± 1.9 postoperative days for bleeding-related revisits and 9.3 \pm 10.0 days for non-bleeding-related revisits. Treatment strategies during these revisits were treat and release in 44 children (74.6%), admission for observation in 8 children (13.5%), and admission for surgery in 7 children (11.9%). The incidence of ER revisit and hospital readmission was similar among children with all levels of SDB severity. Multivariable logistic regression analysis showed that total revisit incidence was associated with perioperative intensive unit stay (odds ratio [OR] = 37.0). Moreover, young children (<3 y) experienced an increased risk of non-bleeding-related revisits (OR = 4.1).

Conclusion: This large-population analysis describes factors associated with revisit and readmission following T&A for children with SDB. Children with severe SDB do not experience increased risks of revisit or readmission; however, young children are at increased risk of non-bleeding-related revisits.

中文題目:	睡眠障礙兒童接受扁桃腺腺樣體切除手術後的急診再次回診
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