

Impact of Adenotonsillectomy on Attention Deficit Hyperactivity Disorder Pharmacotherapy in Children with Adenotonsillar Hypertrophy

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Objective:

To determine the impact of adenotonsillectomy in children with adenotonsillar hypertrophy and attention-deficit hyperactivity disorder (ADHD), by comparing changes in ADHD pharmacotherapy after the operation in a population-based study.

Study Design:

Retrospective cohort and chart review

Methods:

Subjects with adenotonsillar hypertrophy and attention-deficit/hyperactivity disorder who underwent adenotonsillectomy were identified from January 2012 to December 2013 using Taiwan's National Health Insurance Database. Changes in methylphenidate (MPH) prescription for treatment of ADHD was the outcome assessed, and was followed for one year after adenotonsillectomy.

Results:

3301 pediatric patients underwent adenotonsillectomy during the study period. 7.6% of had co-morbid ADHD and was on MPH. In this cohort, adenotonsillectomy decreased MPH usage starting at 4-6 months post-operatively ($p < 0.001$). 1-year after adenotonsillectomy, MPH was discontinued in 61% of the subjects, and its dosage was reduced by more than half in 16% of the subjects.

Conclusion:

For children with ADHD and adenotonsillar hypertrophy, adenotonsillectomy

effectively decreases need of ADHD pharmacotherapy, where 61% of the patients are weaned off methylphenidate (MPH).