Effect of adenotonsillectomy on attention deficit-hyperactivity disorder in children with adenotonsillar hypertrophy: A prospective cohort study

Mohammad Saeed Ahmadi, Jalal Poorolajal, Fatemeh Sadat Masoomi, Mohammad Haghighi


Abstract

Background
This study was conducted to explore the effect of adenotonsillectomy on the improvement of attention deficit hyperactivity disorder (ADHD) symptoms in children with adenotonsillar hypertrophy.

Methods
This prospective cohort study was conducted on 59 children aged 6–12 years with adenotonsillar hypertrophy and ADHD who were candidates for adenotonsillectomy at Besat Hospital, Hamadan University of Medical Sciences, in 2014. The status of ADHD was evaluated at baseline and one and three months after surgery using Conners' Rating Scales.

Results
Of 59 children with ADHD (35 boys and 24 girls), 41 improved one month after surgery and 51 after three months. Only 8 children had no improvement. The Conners' score decreased significantly from 71.37 at baseline to 61.31 (P = 0.001) and 49.14 (P = 0.001) one and three months after surgery, respectively. The score of attention deficit and hyperactivity decreased from 1.76 and 2.10 at baseline to 1.52 and 1.83 after one month (P = 0.001) and to 1.24 and 1.52 after three months (P = 0.001), respectively. The results were statistically significant for both boys and girls.

Conclusion
This study indicated that adenotonsillectomy can significantly improve ADHD in children with adenotonsillar hypertrophy and help them return to normal life.