

Preoperative and postoperative cardiac and clinical findings of patients with adenotonsillar hypertrophy.

[Görür K](#), [Döven O](#), [Unal M](#), [Akku N](#), [Ozcan C](#).

Department of Otorhinolaryngology, University of Mersin School of Medicine, Fatih mah. Babil cad., Girne sitesi D blok No: 1/1, Mezitli, 33170, Mersin, Turkey.
dkgorur@hotmail.com

OBJECTIVE: Our aim was to determine if there was any detectable clinical and cardiac changes in hypertrophied adenotonsillary disease with obstructive sleep apnea syndrome and to demonstrate the curative effect of adenotonsillectomy on these patients. **METHODS:** Thirty-three children with adenotonsillary hypertrophy and sleep related breathing disorders were included in this study group. There were 16 female and 17 male patients and the mean age was 6.9+/-2 years. Age and sex matched control group consisted of 33 children (16 female, 17 male) with a mean age of 6.3+/-2. Complete clinical and laboratory examinations were done for each patient. The results were analysed with the SPSS (statistical package for social sciences) computer program. The significance of changes was performed by means of the independent samples of one-tailed t-test. For categorical variables, chi-square analysis was performed. **RESULTS:** According to our snoring scale, snoring was mild in six patients (18.2%), moderate in 19 patients (57.5%) and severe in eight patients (24.3%). Severe apnea was not observed in any patients, moderate apnea in ten patients (30.3%) and mild apnea was observed in 23 patients (69.7%) preoperatively. Nine patients had Grade IV tonsils, 14 patients Grade III, seven patients Grade II, three patients Grade I. Twelve patients had 3+ (obstructive) adenoids, 21 patients had 2+ adenoids. Chest X-rays showed cardiomegaly in two patients with moderate degree of apnea. Electrocardiogram results were abnormal in four patients. When we compared echocardiographic results of study and control groups, we found several significant differences (RV: 1.6+/-0.3 vs 1.4+/-0.2; P<0.05, LVEDD: 3.6+/-0.5 cm vs 3.3+/-0.4; P<0.05, IVS: 6.8+/-1.4 mm vs 6.1+/-1.1 mm; P<0.05). Also a decreased left ventricular compliance measured by prolongation of deceleration time was found in patient group (DT: 173+/-44 vs. 126+/-22 ms; P<0.001). The echocardiographic results in postoperative group were similar to control group. **CONCLUSION:** This study illustrated that adenotonsillary disease with obstructive sleep apnea symptoms led to right and/or left ventricular enlargement, hypertrophy when compared with control subjects, which were recovered postoperatively.

PMID: 11376817 [PubMed - indexed for MEDLINE]