

# Effect of adenotonsillectomy in children with sleep-disordered breathing

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Children may have a better quality of life (QOL) and diminished cardiovascular disease risk from the decreased endothelin 1 (ET-1) levels after adenotonsillectomy, according to new research published in the December 2011 issue of *Otolaryngology – Head and Neck Surgery*.

SDB is an increasingly common indication for tonsillectomy and adenoidectomy due to obstructive sleep apnea syndrome (OSAS). Cardiovascular (CV) disease frequently has been reported in patients with moderate to severe OSAS, related abnormalities include: systematic hypertension, pulmonary hypertension with cor pulmonale, left ventricular (LV) hypertrophy or dysfunction, cardiac arrhythmias, atherosclerosis, and coronary artery disease.

The study sample included an obstructive sleep apnea survey and a detailed personal and family history. All subjects underwent a complete otolaryngologic examination, otoscopy, and anterior rhinoscopy. Thirty-seven [children](#) with a diagnosis of upper airway obstruction caused by adenotonsillar hypertrophy (ATH) were included in the study. Twenty female and 17 male patients, between 3 and 13 years old participated in the study.

Surgical procedures included: 20 tonsillectomies and adenoidectomies (54%), 15 adenoidectomies only (40.6%), and 2 tonsillectomies only (5.4%). Study results show when comparing moderate and severe cases to mild cases according to Brouillette scores, ET-1 levels were significantly higher in moderate and severe cases (P

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