

[Arch Otorhinolaryngol.](#) 1978 Jan 30;218(3-4):151-62. [Links](#)

## **Relationship between tubal function, craniofacial morphology and disorder of deglutition.**

**[Jonas I](#), [Mann W](#), [Münker G](#), [Junker W](#), [Schumann K](#)**.

26 children without hearing impairment have been examined by otolaryngologists and orthodontists. According to the tubal function test in a pressure chamber they were classified into a group with good and poor tubal function. The E.N.T. examination was inconclusive for a possible relationship between rhinological findings, mode of breathing, sinusitis, size of tonsils, nasal airway resistance and tubal function. Adenoids proved to be a mechanical impairment for active tubal function as stated by many authors. The cephalometric analysis of lateral head films combined with a static and dynamic-functional evaluation of tongue posture revealed significant differences between children with good and poor tubal function. Subjects with a vertical craniofacial growth pattern seem to be predisposed for poor tubal function. Analysing static tongue posture in children with poor tubal function the tongue lies more retracted in a backward position. The back of the tongue is flattened in relation to the palatal arch. In children with good tubal function there is a much closer contact between the back of tongue and the hard palate. Subjects with poor tubal function have an increased incidence of abnormal deglutition combined with tongue-thrust, teeth-apart swallowing, lack of sealing off the anterior oral cavity and contraction of the circumoral musculature. In children with good tubal function one can find the somatic type of swallowing that means no contractions of the circumoral muscles, no tongue-thrust during deglutition but contact of the molars and contraction of the masseter muscle.

PMID: 580174 [PubMed - indexed for MEDLINE]