EFFECTIVENESS OF UPPER RESPIRATORY TRACT SANATION FOR TREATING EUSTACHIAN TUBE DISFUNCTIONS IN CHILDREN

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Introduction.
Various pathological processes in the upper respiratory tract are high risk factors for eustachian tube (ET) obstructions in children. We have conducted objective estimation of the functional condition of the middle ear after surgical treatment of tonsil hypertrophy in children depending on the age.

Materials and methods.
Adenotomy and adenotonsillotomy was conducted among 79 children (N), including 36 patients at the age till 7 years old and 43 children over 7 years old. Estimation of the functional condition of the middle ear (n) before and 3 months after the operation was conducted by means of acoustic tympanometry. Statistical processing of tympanograms (n=308) was conducted using χ2 test.

Results.
Before the operation the apparent obstruction of ET with the registration of the type B tympanogram was observed in 65,2% (n=103/158) cases. Type B tympanogram was registered in 60,1 % (n = 95/158) cases a month after adenotomy and only in 35,4 % (n = 56/158) cases 3 months after surgical treatment. The results of treatment remain stable, as 40 children were examined 6 monthes after adenotomy and type B tympanograms where revealed in 30 % (n = 24/80) cases.

After adenotomy or adenotonsillotomy exudation preservation in the tympanic cavity was proved by the myringotomy in preschool age children in 11,1% (n=8/72) cases and was much more infrequent in school age children – only in 3,5% cases (n=3/86).

Discussion.
Analysis of the efficacy of surgical treatment of tonsil hypertrophy has shown improvement of ET ventilation in both age groups in three months. The number of type B tympanogram decreased from 83,3% (n=60/72) to 47,2% (n=34/72) in a group of preschoolers (p=0,002) and from 50% (n=43/86) to 25,6% (n=22/86) in a group of school age children (p=0,0001).

Qualitative and quantitative improvement of tympanic cavity ventilation must be underlined. Amount of B+C tympanograms decreased from 74,6% (n=118/158) to 58,2% (n=92/158)

Conclusions.
The conducted research proves clinical practice that adenotomy or adenotonsillotomy is effective in treating eustachian tube disfunction and explains high popularity of tonsils surgical sanation among children’s otorhinolaryngologists.

Literature.