MODERN ACHIEVEMENTS IN TYMPONAPLASTY

Abdumannobov Jaloliddin G'olib o'g'li
Samarkand State Medical University.
№2, Department of Otolaryngology, 2nd year Ordinator.
https://doi.org/10.5281/zenodo.13729828

Annotation. In this thesis, information on tympanoplasty is presented in detail, indications and contraindications for these surgical interventions are summarized, operative stages are described, including non-standard cases, and factors affecting postoperative prognosis are considered.

Key words: tympanoplasty, tympanic cavity, hearing.

The main part

The last decades have been marked by rapid development of many areas of science, and this fully concerns medicine, otolaryngology, in particular otology. The creation of modern equipment and optical devices, fine surgical instruments became a condition for qualitative changes in otosurgery.

Reconstructive and functional methods have replaced sanitizing surgical interventions, which, in particular, include the widespread classical general cavity operation, pursuing the goal of not only removing the purulent focus, but also restoring the anatomical integrity and functional activity of the middle ear.

Currently, hearing-improving surgical interventions in children include tympanoplasty, myringoplasty, stapedoplasty, ossiculoplasty, tympanic cavity shunting and cochlear implantation.

Tympanoplastic operations in children are most often used for chronic otitis media and its consequences, after sanitizing operations, and less often for traumatic otitis, congenital anomalies. These operations are usually functional in their purpose and reconstructive in nature.

Tympanoplasty is indicated for most children with chronic otitis media. Currently, some surgeons prefer to perform tympanoplasty on a "dry" ear: either after sanitizing (conservative or surgical) treatment, or after spontaneous elimination of the inflammatory process. Such tactics significantly limit the possibilities of hearing-improving surgery and are not always justified. Other surgeons perform tympanoplasty more widely, often combining it with sanitizing surgery. Clinical practice has shown not only the possibility of using such tactics, but also, under certain indications, the high efficiency of one-stage tympanoplasty for chronic otitis media.

Contraindications to this surgical intervention can be absolute and conditional.

Absolute contraindications include: 1) intracranial complications; 2) cholesteatoma of the tympanic cavity; 3) complete obliteration of the auditory tube; 4) general severe somatic diseases.

Conditional contraindications include:

1) "epidermization" of the tympanic cavity;
2) dysfunction of the auditory tube;
3) immobility of the windows of the labyrinth;
4) deafness;
5) diseases of the upper respiratory tract;

6) allergic diseases, etc.

Tympanoplasty at the stage of sanitizing surgery is possible in the following cases:

1) with preservation of at least 2/3 of slightly changed mucous membrane on the medial wall of the tympanic cavity, mainly in the area of the opening of the auditory tube, the windows of the labyrinth and the promontory wall;

2) with good patency of the auditory tube;

3) in the absence of cholesteatoma in the tympanic cavity;

4) in the absence of bone obliteration of the cochlear window.

Postoperative speech intelligibility depends on the degree of threshold reduction at different frequencies. Thus, threshold reduction only in the high-frequency range has little effect on speech intelligibility, while hearing improvement in the low and especially mid-frequency range significantly improves intelligibility. It is most important to improve hearing in the range of 500-2000 Hz. The lower the bone conduction level, the less effective tympanoplasty is in terms of functionality. Bone conduction thresholds in this range of 40 dB and more make type IV tympanoplasty unpromising, since after the operation the bone-air interval remains within 25-35 dB. However, the use of techniques that improve sound pressure transformation (types I-III) can improve speech perception, since the bone-air interval can be reduced to 10-15 dB.

References:

1. Богомильский М.Р. Современные технологии в диагностике и лечении заболеваний уха у детей. Материалы X конгресса педиатров России. М 2006; 236—238.
2. Sarkar S., Roychoudhury A., Roychaudhuri B.K. Tympanoplasty in children. Eur Arch Otorhinolaryngol 2009; 266: 5: 627—633.
3. Мамадиярова Д. У. Эффективность влияния программы тренинговых занятий по профилактике профессионального стресса у будущих врачей общей практики //Современное образование (Узбекистан). – 2020. – №. 8 (93). – С. 30-37.
4. Мамадиярова Д. У. ОПРЕДЕЛИТЬ УРОВНЯМ ПРОЯВЛЕНИЯ ЛИЧНОСТНОГО АДАПТАЦИОННОГО ПОТЕНЦИАЛА У БУДУЩИХ ВРАЧЕЙ ОБЩЕЙ ПРАКТИКИ С ПОМОЩЬЮ ПРОГРАММЫ ТРЕНИНГОВЫХ ЗАНЯТИЯ //Сучасні тенденції розвитку науки (частина II): матеріали IV Міжнародної науково-практичної конференції м. Київ, 25-26 квітня 2020 року.–Київ: МЦНіД, 2020.–56 с. – С. 38.
5. Мамадияров М. У., Мамадиярова Д. У. PHYSIOLOGICAL OPPORTUNITIES FOR THE PHYSICAL FUNCTION OF THE HUMAN ORGANISM //Re-health Journal. – 2020. – №. 2. – С. 55-58.
6. Мамадиярова Д. У. РОЛЬ ЗАНЯТИЙ МЕДИТАЦИЕЙ ПРИ ПРОЯВЛЕНИИ НЕРВНО-ПСИХОЛОГИЧЕСКОГО НАПРЯЖЕНИЯ У БУДУЩИХ ВРАЧЕЙ ОБЩЕЙ ПРАКТИКИ //Том-2. – 2021. – С. 624.
7. Umirzakovna M. D. ЭФФЕКТИВНОСТЬ ПРОГРАММЫ ТРЕНИНГОВЫХ ЗАНЯТИЙ ПО ПРОФИЛАКТИКЕ НЕРВНО-ПСИХИЧЕСКОГО НАПРЯЖЕНИЯ И СИТУАТИВНОЙ ТРЕВОЖНОСТИ У БУДУЩИХ ВРАЧЕЙ ОБЩЕЙ ПРАКТИКИ //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 3.

8. Мамадиярова Д. У. Уровни профессионального стресса у врачей общей практики //Сборники конференций НИЦ Социосфера.–Vedecko vydavatelske centrum Sociosfera-CZ sro. – 2020. – Т. 18. – С. 14-17.