



## SURGICAL APPROACHES IN THE THERAPY OF CHRONIC PURULENT OTITIS MEDIA

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### ✓ *Resume*

*According to our results, studies with relapses of CPSO after sanitizing operations in patients operated on by "open" methods, from pathological changes most often (64.5%), incomplete epidermization of the trepanation cavity was detected. This set us the task of contributing to the improvement of surgical techniques, to accelerate epidermization and prevent "diseases of the operated ear". According to our early study result, sanitary reoperation in this group of patients did not exclude mastoidoplasty using a pedicled flap formed as a material filling the drill cavity from the temporalis muscles.*

*Key words: Surgical approaches, treatment of chronic suppurative otitis media, operations with "open" methods*

## ХИРУРГИЧЕСКИЕ ПОДХОДЫ В ЛЕЧЕНИИ ХРОНИЧЕСКОГО ГНОЙНОГО СРЕДНЕГО ОТИТА

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### ✓ *Резюме*

*По нашему результату, исследования при рецидивах ХПСО после санирующих операций у больных, оперированных «открытыми» методами, из патологических изменений чаще всего (64,5%) выявлялась незавершенная эпидермизация трепанационной полости. Это Нам поставило задачу по способствованию к совершенствованию хирургической техники, для ускорения эпидермизации и профилактики «заболеваний оперированного уха». По нашему раннему результату исследования показало санитарная повторная операция у этой группы пациентов не исключала мастоидопластику с использованием лоскута на ножке, сформированного в качестве материала, заполняющего полость сверла от височных мышц.*

*Ключевые слова: Хирургические подходы, лечения хронического гнойного среднего отита, операции «открытыми» методами*

## SURUNKALI YIRINGLI OTITNI DAVOLASHDA XIRURGIK YONDASHUVLAR

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### ✓ *Rezyume*

*Bizning natijalarimizga ko'ra, "ochiq" usullar bilan operatsiya qilingan bemorlarda sanitarizatsiya operatsiyalaridan keyin CPSO relapslari bilan olib borilgan tadqiqotlar, patologik o'zgarishlardan ko'pincha (64,5%), trepanatsiya bo'shlig'ining to'liq bo'lmagan epidermatsiyasi aniqlangan. Bu oldimizga jarrohlik texnikasini takomillashtirishga hissa qo'shish, epidermisatsiyani tezlashtirish va "operatsiya qilingan quloq kasalliklari" ning oldini olish vazifasini qo'ydi. Bizning dastlabki tadqiqot natijalariga ko'ra, bemorlarning ushbu guruhidagi sanitariya reoperatsiyasi temporal mushaklardan burg'ulash bo'shlig'ini to'ldiradigan material sifatida shakllangan pedikli qopqoq yordamida mastoidoplastikani istisno qilmadi.*

*Kalit so'zlar: Jarrohlik yondashuvlari, surunkali yiringli otitni davolash, "ochiq" usullar bilan operatsiyalar*

## Relevance

Chronic inflammation of the middle ear, despite significant progress in prevention, diagnosis and treatment, remains one of the most common and dangerous childhood diseases. This is due to many medical and social reasons, as well as such adverse effects as hearing loss and the risk of intracranial complications caused by exacerbations of a chronic process in the middle ear. The modern definition of chronic purulent otitis media (CPOM), summarizing the main features of this disease, was given by V.T. Palchun et al. [1]. CPOM is a chronic purulent inflammation of the middle ear, which occurs with persistent perforation of the tympanic membrane, persistent or recurrent suppuration from the ear, and hearing loss of varying degrees, gradually progressing with a long course of the disease [1, 2]. In addition, to date, CPOM is also dangerous as a source of formidable intracranial complications (mastoiditis, meningitis, brain abscess, sinus thrombosis). Changes in the etiological structure and sensitivity of CPOM pathogens in the last decade have had an impact on the nature of inflammation in the middle ear, its severity, and the duration of the course of the disease [5].

Analyzed pathological changes with relapse CPOM at 45 sick after various sanitizing options operations on the ear. The degree of epidermization was assessed postoperative cavity, presence of productive elements, excessive scarring with dissociation of the postoperative cavity, formation cholesteatoma and destructive changes. Most often at sick diagnosed combinations pathological changes in connection with which their total number exceeded number of examined sick.

At 31 from 45 sick with relapse CPOM after sanitizing operations, the ongoing inflammatory process was due to insufficient surgical debridement, often due to incomplete removal of mastoid cells process. Such pathological changes were equally common like in patients operated earlier by "open" methodologies (67.7%), so in those who have undergone sanitation in the past "closed" operation (71.4%). In the examined patients, unsanitized mastoid cells processes were visualized only at contemporary radiological methods, on the temporal radiographs bones in traditional laying these cells in the area of scales and tops mastoid offshoot masked inflammatory exudate and productive changes. In 14 patients, preoperative radiographs of the temporal bones obtained from clinical or personal archives. It turned out, what previous planning volume of transactions corresponded to the X-ray topic of the disease, but remote, especially apical cells on the pictures not differentiated and as consequence in the scope of the transaction was not included. With the introduction advanced radiological techniques, tomograms with small step, these latent zones become available for diagnostics and reason for limited reoperations. It was retrospectively established that in 9 patients active manipulations in the mastoid process during time has been narrowed surgeons in force individual topographic features of the sigmoid sinus adjacency and that appeared during the operation venous bleeding, atypical location facial nerve, destructive defect of the upper wall with exposure of hard meninges.

Excess scarring mastoid cavities stated at 6 (19.3%) sick, operated previously "open" ways, And at 4 (28.6%) - "closed". The formed scar tissue uncoupled the postoperative cavity, making it difficult its drainage and pneumatization. These of patients before the previous operation, the general surgical history was not studied, there was no tendency to develop excessive scars, no prevention them education. At 7 sick revealed overgrowth in trepanation cavities ionic granulation fabrics. Such changes were or at sick with big trepanation cavities and with insufficient epidermal their coverage with traditional types of skin plasty of the external auditory canal (5 people operated by "open" methods), or in patients operated according to "closed" methods (2 people) with concomitant decompensated somatic conditions (diabetes mellitus, tuberculosis) that worsen reparative processes.

Pathological changes cavities middle ear at sick with relapse CPOM after sanitizing operations

Pathological changes	" Open " option P = 31		" Closed " option P = fourteen		R
	P	%	N	%	
incomplete epidermization	20	64.5	0	0	
Saved cells	21	67.7	10	71.4	>0.05
Productive elements	5	16.1	2	14.2	>0.05
excess scarring	6	19.3	4	28.6	>0.05
relapse cholesteatoma	3	9.7	nine	64.2	5
destructive changes	4	12.9	nine	64.2	fi0 05/

Incomplete epidermization trepanation cavities identified at 20 (64.5%) people, operated previously by "open" methods. Almost at of all, it was combined with under- opening of the air cells of the mastoid process, an open auditory tube, mucositis phenomena , and, as a result, with productive and destructive changes. This prompted the search for new surgical techniques to accelerate epidermization and prevention of "trepanation cavity disease". After completion, sanitizing stage of reoperation was performed skin plastic surgery mastoid postoperative cavity. Using this technique, 14 patients from this group were operated on, and 13 (92.8%) of them managed to achieve good results. Epidermization postoperative cavities and rack remissions.

Destructive changes and recurrence of cholesteatoma more often ( $p+0.05$ ) were observed in patients operated "closed" ways. Common changes and the presence of complications in 11 out of 14 people in this group prompted implementation-sanitizing reoperation according to the "open" type. Detection at sanitizing reoperation unchanged rear walls outdoor auditory passage against the background of the sclerotic type of the structure of the mastoid process and the small size of the mastoid cavities created the preconditions for mastoid plasty . As a material filling the trepanation bone cavity, we used pedicled flap formed from the temporal muscles.

### Conclusions

Thus , in case of recurrence of CPOM after sanitizing operations in patients operated on "open" methods, from pathological changes most often (64.5%) came to light incomplete epidermization trepanation cavity. This prompted the improvement of surgical techniques. For acceleration epidermization and prevention, "diseases operated ear." With recurrence of CPOM after "closed" sanitizing operations cholesteatoma and destructive changes against the background of unsanitized mastoid cells. Sanitizing reoperation in this group of patients did not rule out mastoidoplasty using a pedicled flap formed as a material filling the burr cavity. From temporal muscles.

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