

SHORT REPORT

Current Concepts in Otology and Ear Surgery in Russia: Comparative Analysis of Diagnostic and Treatment Approaches

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Although the basic principles of ear surgery have already been accepted, there is no scientific evidence on the outcome parameters of the techniques of operations. A lot of trends on this question are described in the literature, however, in daily work practicing doctor has got used to rely on own knowledge and experience. Range of preoperative diagnostic procedures varies and frequently depends on personal preferences of a doctor. We made an analysis of opinion among domestic otolaryngologists on the basic questions about preoperative diagnostics, usage of different types of grafts and prostheses by means of a questionnaire. Also we compared the results with a similar survey carried out in Europe.

Distinctions in opinions of the specialists were traced during discussion of questions concerning the choice of graft for Miringoplasty and Tympanoplasty, amount of preoperative diagnostics, postoperative care of the patients and terms of control of bone conduction.

Statistical analysis of the survey revealed main points of controversy among otologists, which were caused first of all by the lack of technical equipment, and of course, by the difference in professional knowledge level of the surgeons. In our work the basic results of the given comparative analysis are stated. We hope that this analysis will contribute to standardize concepts in otology to facilitate a safe, efficient, and effective standard of care for our patients.

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The aim of our study was to reveal a common algorithm in diagnosis and treatment of ear diseases in Russia and to compare the data to the European standards (according to the Results of European Survey on Current Controversies in Otology published in "Otology and Neurotology" Journal, Vol.28, No. 6. 2007).

A questionnaire of 14 multiple-choice questions was compiled, and 230 copies were distributed to ENT specialists all over Russia. The feed back was 60 analyzable questionnaires.

The need for preoperative diagnostics such as plain X-ray was mentioned by the Russian specialists three times more often than in Europe. Ninety-three percent of respondents in Russia and Europe always perform a CT scan before surgery for Cholesteatoma. The need for a CT scan is considered differently in relation to special cases by Russian and European ENT specialists. Pure-tone audiometry is used in all cases

by both groups equally. The data differ significantly in the field of speech audiometry analysis. This method is used in twice as many cases by European surgeons because of its ability to make a prognostic estimate on the functional outcome of hearing-improvement operations or further hearing aid fitting. According to the data received, vestibular function assessment is used in Russia 5-7 times more than in Europe. This significant difference is due to the fact that in Europe vestibular function assessment includes a larger number of tests while Russian respondents meant only the Barany's caloric test. Eustachian Tube Function (ETB) testing is widely practiced in Russia. Today it may be considered as the "Old school" heritage.

Only 41 % of Russian doctors use antibiotics during the 2 weeks of the preoperative period while 73 % in Europe use them. Perioperatively antibiotics are given in 38.3% cases in Russia against 56% in Europe.

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Postoperatively the antibiotics are prescribed in 88.3 % cases in Russia and 55 % in Europe.

The surgery (Myringoplasty / Tympanoplasty in an inflamed ear) was performed regardless of ear inflammation by 21% of both by Russian and European specialists.

For reconstruction of minor defects of the ear drum, the temporalis fascia was accepted as the most preferable graft by Russian (78%) and European surgeons (77 %). Cartilage graft (about 45 % for both Russia and Europe) was the second preference, and Perichondrium was the third - (22 % in Russia and 43% in Europe) .

Regarding alloplastic materials for reconstruction of the ossicular chain, Hydroxylapatite has not been mentioned by Russian surgeons while 21% of

Europeans otorhino Laryngologists selected as a material for incus prosthesis.

Titanium implants are more commonly used in Europe - 63.5% while only 14.2% in Russia. We have to add also that an autologous cartilage or sometimes ossicles are still used by Russian ear surgeons. This is the graft of choice for 57% of respondents. While in Europe the majority of doctors - 39% prefer to carry out audiometry in the first day after operation, in Russia - 20%.

According to the Russian questionnaire - 59% of Russian otorhino Laryngologists carried out this diagnostic in the period from 1 to 4 weeks against 21% of Europeans. In the period from 1 up to 3 months, 46.4 % of Russian doctors perform audiometry, while in Europe - only 23 % of respondents.