The monograph "Evolution of otitis media in children"

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The monograph describes the development, evolution and outcomes of otitis media (OM) in children, the middle ear (ME) pathology, which affects 90% of children. Some of OM forms provoke intracranial complications, chronic suppurative OM, hearing loss and permanent disability. The detection and prognostics of those OM forms and intensive treatment including surgical one in small children prevent from the negative disease evolution.

OM represents the group of ME pathology, which begins in early childhood from asymptomatic hearing loss, manifested by short-duration acute pain, continues to prolonged forms (persistent and recurrent OM) and progresses to chronic forms in adolescence. The significance of OM for child's development and uncertain criteria for differential diagnosis of various OM forms cause a large variety of treatment modalities and methods. Some of them influence the clinical improvement, but long-term results do not correlate with initial positive changes. Another approach significantly reduces recurrence and complication rates, but increases the number of ear surgery at an early age and makes tympanostomy (TS) the most frequently surgery performed in some countries. In Moldova chronic OM, otogenic complications and chronic hearing loss rates are relatively high, that indicates the necessity of further OM researches. The importance of this study is evident: understanding of OM transformational mechanism is the basis for the elaboration of curative and preventive approaches.

In collaboration with the Society "Pediatricians due Monde" (France) and Mayo Foundation, Mayo Clinic (USA) the author conducted several projects in order to create a system of OM management in Moldova. Specific goal of OM management is ME physical and acoustical restoration and prevention of OM persistence and recurrence.

The author presented analysis of OM development and evolution in childhood and their changes under the different methods of treatment on the basis of noninvasive monitoring of the middle ear status in big cohorts of children. The complex of noninvasive diagnostic tools which were used for this research is completed by microbiological, immunological and radiological exams, monitoring of quality of life (QL) and general health characteristics (GH).

Having analyzed the results of monitoring and assessment of the physical, acoustical data, hearing, QL and GH indexes the author evaluated the feasibility of therapeutic activities conducted in OM in the world and proposed the System of management of OM in childhood in Moldova.

The System is based on ME monitoring in children with high score risk factors (RF) for specification of treatment including surgical intervention. The diagnostic algorithm formulated by the author highlights the conditions and diseases, which contribute to OM evolution and progression. Detailed analysis and monitoring of electroacoustical and electrophysiological data of every child from the risk group discover tendency to persistence and recurrence of the ME pathology. The author recommends complex of examinations and treatment for symptomatic differentiation and independent OM forms. Exploring advantages and disadvantages of surgical procedures for OM in childhood the author elaborated the modified tympanostomy (MTS), designed for better functional results and prevention of OM persistence or recurrence. Post-surgical otomicroscopical and electro-acoustical monitoring demonstrated a stable high score of patients' hearing, QL and GH indexes.

The monograph is presented on 160 pages and consists of introduction, 4 chapters and general conclusions. Every chapter is completed by relevant bibliographic index with total number of 256 references. In the introduction the author reviews the background and scientific significance of the problem, determines the main aim and formulates the tasks of the study, describes international and national projects which formed the basis of this research.

The general part of the monograph is composed of 4 chapters. In the first chapter the author characterizes contemporary definitions, discusses features and study results of OM epidemiology, RF, pathogenesis and etiology. The second chapter is combined of clinical classification and diagnostics of OM in childhood. In the 3rd chapter the author describes methods of treatment – classical and contemporary and presents principles of the OM management. The 4th chapter contains data of the natural evolution of OM in children, formation of adhesive and persistent OM and the influence of treatment modality on the evolution of ME pathology. Conclusions of the monograph summarize the most important basic tendency of OM evolution in children and principles of OM management in childhood. The results of the research are illustrated in the monograph by 29 figures, 6 tables and 5 schemas.

Conclusion: the monograph "Evolution of otitis media in children" by Doctor Diacova Svetlana is the result of an original research with a certain scientific value and practical significance. It is recommended to otorhinolaryngologists, pediatricians, family doctors, residents and students.

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