Introduction

The problem of rhinosinusitis is one of the most pressing in modern pediatrics and pediatric otorhinolaryngology. In recent years, the prevalence of diseases of the nose and paranasal sinuses in children is 28-30% of all diseases of the upper respiratory tract. In the world there are nearly 1 billion cases of viral respiratory tract infections each year, with about 5% of them are complicated by a bacterial infection of the paranasal sinuses, and the number of patients with inflammation of the paranasal sinuses is increased by an average of 1.5-2%. In most cases a triggering factor rhinosinusitis is a respiratory viral infection that causes swelling and infiltration of the nasal mucosa and thus obstruction of outlet openings sinuses, as well as disrupting the function of the ciliated epithelium impairs the clearance and evacuation of the contents of the sinuses, thereby creating favorable conditions for the development of bacterial superinfection. The main venue clusters and agents of growth in childhood is the lymphoid tissue of the nasopharynx. Often it begins with the development of rhinosinusitis adenoiditis. The most vulnerable in this situation are the children of preschool age with hyperplasia limphoparyngeal ring. It is in this group of children, often noted for recurrent diseases of the upper respiratory tract (rhinitis, sinusitis, otitis). Treatment of rhinosinusitis in children directed both to fight the infectious agent, and the creation of optimal conditions for the outflow of pathological content of the sinuses, which used topical vasoconstrictor drugs (decongestants), among which are currently the greatest preference is given to derivatives of imidazoline. Despite the widespread use of local vasoconstrictors and irrigation therapy in complex treatment of infectious rhinosinusitis in the literature available to us are not able to find work on the use of topical decongestants, namely xylometazoline 0.05%, with isotonic sodium chloride solution for nasal application and without soul nasal shower children with hyperplasia limphoparyngeal ring, which was the aim of the present study.

Materials and methods

We observed 100 patients aged 2 to 6 years, randomly distributed into 2 groups of 50 children each. Application mode: one injection into each nostril twice a day; sodium chloride 0.9% was used in the form of nasal soul of the first group of children twice a day before use xylometazoline solution. Clinical research method consisted of evaluating data on history, clinical picture of the disease, general clinical research methods. Smear-mark for cytomorphological analysis of the nasal mucosa was carried out in the morning. Quantification of secretory sIgA in saliva was performed by enzyme immunoassay. The results were processed by U test and the Mann-
Whitney angle φ Fisher criterion. The study was conducted in accordance with the ethical principles for medical research involving human subjects, which were adopted by the Declaration of Helsinki (2008) and Good Clinical Practice (GCP).

Results
The use in combination with xylometazoline nasal shower in children of group 1 showed a statistically significant improvement in nasal breathing in the form of a larger number of children with a free nasal breathing. The use of xylometazoline 0.05% in combination with a nasal shower NaCl 0.9%, provided statistically significant regenerative and sanation action on the nasal mucosa in all parameters investigated. Using the solution in combination with Xylometazoline preliminary shower bow sodium chloride 0.9% in contrast to the preparations without applying xylometazoline nasal cavity are not accompanied by decrease of the secretory sIgA levels in saliva, and on the contrary, it leads to some increase. Conclusion: The use of the preparation with 0.05% xylometazoline nasal shower preliminary sodium chloride 0.9% in the treatment of acute rhinosinusitis program in children with hyperplasia limphopharyngeal ring aged 2-6 years has significant advantages over the use Xylometazoline without preconditioning of the nasal cavity: more rapid improvement of clinical symptoms of the underlying disease according to doctors and parents of patients; restoration cytoarchitectonics mucous membrane of the nose with the strengthening of its functioning and the protective barrier properties (increasing the concentration of secretory sIgA); good tolerance and safety in five-day use.