Clinical and Preventive Efficacy of Phytopreparations in Pre-school Children with Adenotonsillar Pathology

Kemerovo State Medical University

10.1136/archdischild-2021-europaediatrics.157

Aim Assessing efficacy of Tonsilgon N in pre-school children as an etiotropic drug in complex therapy of adenotonsillar pathology at the rehabilitation stage.

Materials Within the period from 2011 to 2015, 1,076 children (aged from 2 to 5 years) with a history of pathologies of nasopharyngeal and palatine tonsils in 100% of cases were reviewed. Pre-school children were given Tonsilgon N phytopreparation in the form of drops in age-specific doses within 30 days. The control group included 200 children. The phytopreparation efficacy was analyzed before and after the preventive therapy.

Results A year prior to the preventive therapy, degree II nasopharyngeal tonsil hypertrophy complicated by adenoiditis was noted in 71.3% of children in the treatment group and in 74.5% of children in the control group. Degree III nasopharyngeal tonsil hypertrophy made 28.7% and 25.5%, respectively. A year after the rehabilitation therapy, only 32.9% of patients in the treatment group did not show improvement in the clinical presentation. Symptoms of adenoiditis were practically relieved in half of the patients, nasal breathing was restored in 95.8% of patients, the size of a nasopharyngeal tonsil was reduced from degree II to degree I in 64.9% of patients. Normalization of the rhinoscopy presentation was noted in 82% of patients, 77.9% of patients showed reduction of the ARI rate from 5–8 to 2–3 times a year. Endoscopic control confirmed reduction of size of both nasopharyngeal and palatine tonsils in 64.9% of patients. The hypertrophy degree of nasopharyngeal and palatine tonsils in pre-school children not receiving Tonsilgon N phytopreparation did not show any change. In addition, hypertrophy demonstrated increase from 74.5% to 83% over time.

Conclusions Prospective study of children receiving Tonsilgon N as a rehabilitation method demonstrated its efficacy on immune development of the respiratory tract. The obtained data allow us to recommend Tonsilgon N to be included in programs of immune rehabilitation and prevention of exacerbations of adenotonsillar pathology.

Bac-Set® Forte Multistrain Probiotics Complex in the Prevention of Adenotonsillar Pathology in Preschool Children

Institution of the presenting author

10.1136/archdischild-2021-europaediatrics.158

Goal to study the efficacy of the probiotic complex Bac-Set Forte Multistrain in the medical treatment of children with adenotonsillar pathology.

Methods during the period of 2016-2019, 346 children (3-6 years old) with chronic pathology of pharyngeal and Palatine tonsils, suffering from recurrent respiratory infections, were examined. The treatment group (n=230) was getting a multistress probiotic complex Bac-Set Forte (UK) daily, 1 capsule per day for 30 days, as well as irradiation and elimination therapy, as prevention of exacerbations of chronic nasopharyngeal pathology. The group under control (n=116) was getting only irradiation and elimination therapy.

Results before the start of the therapy with the probiotic complex Bac-Set Forte, pharyngeal tonsil hypertrophy of the 2nd degree with complicated adenoiditis was observed in 76.3% of children in the treatment group and in 75.8% of children in the control group (P=0.2376). By the end of the study nasal breathing was restored in 62.7% of patients of the treatment group; symptoms of adenoiditis were stopped in 51.8% of patients (P=0.000); 82.7% of patients had a decrease in the volume of the pharyngeal tonsil to the 1st degree (P=0.000); 78.9% of patients had a normal rhinoscopic picture (P=0.000); endoscopic control confirmed a decrease in the size of the palatine tonsils in 56.8% of patients (P=0.000), a decrease in the frequency of recurrent respiratory infections in 72.6% of children from 5-8 times to 2–3 times per year (P=0.000). In the control group, the degree of hypertrophy of the pharyngeal and Palatine tonsils did not change and even increased in dynamics in 81.4% of patients.

Conclusion the results of the study confirmed the effectiveness of the probiotic complex Bac-Set Forte Multistrain. Prospective monitoring of children who received Bac-Set as prevention of exacerbations of adenotonsillar pathology confirmed its effectiveness in forming the immunity of the respiratory tract.

Severe Presentation of Netherton Syndrome: A Case Report


10.1136/archdischild-2021-europaediatrics.159

Netherton syndrome (NS; MIM256500) is a rare genodermatosis with autosomal recessive inheritance characterized by the triad of ichthyosiform erythroderma, hair shaft abnormality, and an atopic diathesis. The primary defect in NS is loss-of-function mutations in the gene coding for serine protease inhibitor Kazal-type 5 (SPINK5). The defective expression and function of this inhibitor induce a severe skin barrier defect. It is also considered a primary combined immunodeficiency with associated or syndromic features as many patients have an increased tendency for infections and abnormal levels of various immunoglobulins.

We report a case of a female patient born as a first child of nonconsanguineous parents that presented in early infancy as a severe systemic disease with generalized erythroderma, dryness and skin desquamation, hypernatraemic dehydration, failure to thrive and recurrent severe skin and systemic infections (Staphylococcus aureus, Klebsiella pneumoniae, Pseudomonas aeruginosa). During follow-up, she presented with elevated IgE levels, atopic dermatitis and food allergies (including anaphylaxis to egg proteins). Flow cytometry of peripheral blood lymphocytes and lymphocyte proliferation test were within the reference range. Due to severe life-threatening infections, the patient receives monthly immunoglobulin infusions. Genetic analysis revealed that our patient has two pathogenic SPINK5 variants, c.[153delT], p.(Gln52LysfsTer6) and c.[1431-12G>A], p.(?). It has been reported that cases of