Clinical efficacy of BAC-SET® forte multistrain probiotics complex in the prevention of adenotonsillar pathology in preschool children

Vera Vavilova, Alexsandr Vavilov, Asya Cherkaeva, Irina Nechaeva, Vitaliy Tiuliukin

Kemerovo State Medical University, Kemerovo, Russian Federation

Objective. To study BAC-SET® Forte multistrain probiotic complex efficacy and safety in humans in preschool children with adenotonsillar pathology.

Methods. For the period 2016–2019, 346 children (3–6 years old) with a history of chronic pathology of pharyngeal and palatine tonsil and suffering from frequent recurrent respiratory infections were observed.

The average age was 4.53 ± 2.71 years. Preschool children of the treatment group (n = 230) received multistrain probiotic complex BAC-SET®Forte as a prevention of exacerbations of chronic nasopharyngeal pathology daily, in addition to irrigation and elimination therapy (nasal shower with 0.9% NaCl solution); 1 capsule a day was prescribed for 30 days. The control group (n = 116) was on irrigation and elimination therapy only. The analysis of the efficiency and safety of the multistrain probiotic complex was carried out before and after the preventive course.

Results. A year before the start of the preventive course with BAC-SET®Forte multistrain probiotic complex, the pharyngeal tonsil hypertrophy of degree 2 and with complication by 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, only 30.4% of patients in the treatment group showed no improvement in the clinical picture (p = 0.000). A year after the recovery stage, 62.7% of patients which were on the multistrain probiotic complex had recovered nasal breathing (p = 0.001); the symptoms of adenoiditis were almost stopped in 51.8% of patients (p = 0.000); 82.7% of patients had a decrease in the volume of the pharyngeal tonsil from degree 2 to 1 (p = 0.000); 78.9% of patients had a normalization of the 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). The degree of hypertrophy of the pharyngeal and palatine tonsils in preschool children who did not receive the multistrain probiotic complex did not change and even increased in dynamics in 81.4% of patients.

Conclusions. The study results have confirmed the efficiency and high tolerability of BAC-SET®Forte multistrain probiotic complex. Prospective observation of children who was on BAC-SET® as a prevention of exacerbations of adenotonsillar pathology have confirmed its efficacy in the formation of respiratory tract immunity. The obtained data allow us to recommend the addition of BAC-SET®Forte multistrain probiotic complex in programs for the prevention of exacerbations of adenotonsillar pathology in children.