

Determination of the effectiveness of short-term nebulizer therapy in bronchiectasis

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BACKGROUND. While the incidence of bronchiectasis is increasing every year, the treatment of this category of patients today is a real challenge for practical medicine, as the only existing guideline contain only low and medium quality data.

OBJECTIVE. To determine the effectiveness of short-term differentiated inhalation therapy with salbutamol (Nebutamol®, “Yuria-Pharm”), hypertonic sodium chloride solution with sodium hyaluronate (Lorde® gial, “Yuria-Pharm”) and decametoxinum (Decasan®, “Yuria-Pharm”) in patients with bronchiectasis, which was separated the for four different subgroups depending on the presence of sputum colonization by pathogens and airways obstruction.

MATERIALS AND METHODS. 99 adult patients with confirmed clinically significant bronchiectasis in a stable condition were included in a single-center prospective study lasting 12 months. The number of exacerbations in the previous year and the year after treatment, subjective assessment of the severity of cough and sputum, amount of daily sputum, serum C-reactive protein level, microbiological examination of sputum, and spirometry were performed.

RESULTS AND DISCUSSION. Short-term personalized inhalation therapy with bronchodilators, mucolytics and antiseptics in the subgroup of patients with airway obstruction and colonization reduced the severity of the main symptoms and reduced the total bacterial load by 45.9 %, and in the subgroup of patients with airway colonization without airway obstruction reduced the severity of cough and the total bacterial load in 76.2 % of cases. Prescribed therapy was effective in statistically significant reduction in the number of exacerbations by 43 %.

KEY WORDS: bronchiectasis, nebulizer therapy, inhaled mucolytic, bronchodilators, decametoxinum.