DECAMETHOXIN: NEBULIZER THERAPY OF INFECTIOUS EXACERBATION OF CHRONIC BRONCHITIS

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Abstract. Exacerbation of chronic bronchitis (CB) is a risk factor for death, hospitalizations, respiratory symptoms worsening, limitation of physical activity and disability of the patients. The causes of 60 to 80 % of all exacerbations of CB are infectious agents. The aim: To study the spectrum of the infectious agents of the chronic bronchitis exacerbation and to improve the effectiveness of treatment of patients with this disease. *Materials and methods*. For the study of the infectious agents of the chronic bronchitis exacerbation, virological and microbiological studies of sputum, washings, or smears from the nasal mucosa were performed in 100 patients with infectious exacerbation of CB. 146 patients participated in the study of the treatment efficacy, which was divided into three groups depending on the volume of anti-infective therapy (group I — antibacterial drug + mucoregulator, group II — antibiotic, mucoregulator + inhalation 0.02 % decamethoxin solution, group III — mucoregulator + inhalation 0.02 % decamethoxin solution). The effectiveness of the treatment was evaluated on days 3–5 (visit 2) and 10–14 day s (visit 3) from the beginning. *Results*. In the study of the exacerbation agents of the CB, in 44.0 % of cases viruses, in 35.0 % — bacteria, and 21.0 % — virus-bacterial associations were identified. Under the influence of treatment, the number of patients who had a severe cough before the 2 visits, in group I was 9.5 %, in the second — 10.5 %, in the third — 5.6 %. At the end of treatment, moderate cough persisted in 41.5 % of patients of group I, 7.0 % of patients of group II patients and 22.2 % of group III patients. By visit 3, normalization of body temperature in the observation groups was achieved in 73.6 % of patients of the first group, 89.5 % of patients of the second group and 72.2 % — of the third group. Hyperemia of the throat and difficulty in nasal breathing in patients of group II by the end of treatment decreased in a greater number (54.4 %) of patients compared with patients of group I (30.2 %), $p < 0.05$. Symptoms of rhinitis in patients of group III by the end of treatment decreased in more patients (52.7 %) compared with patients in group I (32.1 %), $p < 0.05$. The total duration of antibacterial therapy in patients in group 1 was on average (7.8 ± 0.8) days, and in patients in group 2 — (5.7 ± 0.6) days ($p < 0.05$). *Conclusions.* The additional inhaled use of decamethoxin 0.02 % sterile solution in the complex treatment of patients with infectious exacerbation of CB allowed to reduce the severity and duration (on average by 1–2 days) of the manifestations of intoxication and catarrhal phenomena. Nebulizer therapy with 0.02 % decamethoxin sterile solution solution reduces the duration of infectious exacerbation of CB by 1.6 days, reduces the duration of antibiotic use by 2 days, and also avoids the unnecessary administration of antibacterial drugs in the mild course of infectious exacerbation of CB.

Key words: Infective exacerbation chronic bronchitis, decamethoxin, nebulizer therapy.

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