

EFFICACY OF ERDOSTEINE IN COMPLEX TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Abstract. *Aim* — to evaluate clinical efficacy of erdosteine in complex treatment of COPD. *Methods.* 46 patients with chronic obstructive pulmonary disease (COPD) were divided into experimental and control groups. Experimental group consisted of 23 patients, who received erdosteine 300 mg BID during 14 days. Depending on results of bronchoscopy and grade of inflammation a duration of treatment could be extended for additional 7 to 14 days. 23 patients from control group received standard therapy. The efficacy was evaluated after 1 month of treatment. Bronchoscopy findings were evaluated according to J. Lemoine classification. Lung function was tested using computed analysis of flow-volume spirometry curve. In order to evaluate the influence of erdosteine on cellular factors, a bronchoalveolar mucus was examined for absolute and relative cell count. *Results.* In experimental group a reduction of clinical symptoms was observed: cough reduced 5 times (from $(2,86 \pm 0,13)$ to $(0,56 \pm 0,08)$ points), dyspnea –3,5 times, sputum production — 3 times, dry rales –7,5 times. A regression of clinical signs in control group was less prominent: 2,6 times decrease for cough, 2 times — for dyspnea, 1,6 times — for sputum and 1,5 times — for dry rales. After 1 month of treatment in patients of both groups there was a significant improvement of lung function, confirmed by an increase of FEV_1 , FEV_{25-75} , PEF values and decrease of RV. By the end of treatment 4 (17,4 %) patients of experimental group stopped using bronchodilators, and 14 (60,8 %) reduced its dose 2–3times. On the contrary in control group none of the patients stopped bronchodilators use, while it became possible to reduce its dose only in 8 (34,8 %) of patients. A cellular count of bronchial mucus changed significantly in patients of experimental group. A cytogram demonstrated an increase of alveolar macrophage count on the background of decreased number of neutrophils. At the same time in cellular count of control group patients the neutrophils dominated. *Conclusion.* Use of erdosteine in complex treatment of COPD was effective. Erdosteine reduced clinical symptoms, improved lung function, reduced the grade of inflammation in a majority of patients.

Key words: erdosteine, lung function, chronic obstructive pulmonary disease.

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