THE IMPACT OF ERDOSTEINE AS A COMPONENT OF MAINTENANCE CHRONIC OBSTRUCTIVE PULMONARY DISEASE THERAPY IN PATIENTS WITH GASTROESOPHAGEAL REFLUX DISEASE AND SECONDARY BRONCHIECTASIS ON THE EFFECTIVENESS OF TREATMENT FOR POLYMORBID CONDITIONS

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Abstract

The aim of the study: to evaluate the efficacy of adjunctive therapy with erdosteine in patients with chronic obstructive pulmonary disease (COPD) with comorbid gastroesophageal reflux disease (GERD) and/or secondary bronchiectasis (BE), based on pulmonary function parameters and health-related quality of life.

Materials and methods. A prospective study was conducted at the Infectious Diseases Center of Ivano-Frankivsk involving 130 patients diagnosed with GOLD stage 3 COPD. Participants were stratified into subgroups: COPD+GERD (IIa, n=34) and COPD+GERD+BE (IIb, n=25). 14 patients from each subgroup received erdosteine (300 mg twice daily) in addition to standard therapy over a six-month period. Functional outcomes were assessed using spirometry and the St. George's Respiratory Questionnaire (SGRQ). Measurements were taken at baseline, 30, and 180 days. Statistical analysis included parametric and non-parametric methods, with significance set at $p<0.05$.

Results. Erdosteine therapy resulted in statistically significant improvements of FVC, FEV_1, and maximum expiratory flows (MEF25–75) at 180 days in both intervention subgroups. SGRQ scores in the COPD+GERD group improved significantly by day 30 and remained stable at 180 days. In contrast, the COPD+GERD+BE group showed delayed but clinically significant improvement only at day 180. Between-group comparisons demonstrated greater early response in patients without BE, but effects equalized by day 180.

Conclusion. The addition of erdosteine to standard therapy in COPD patients with GERD and BE improved pulmonary function and enhanced quality of life. The presence of BE delayed but did not affect the therapeutic benefit. These findings support the role of personalized anti-inflammatory mucolytic therapy in complex COPD phenotypes.

Key words: COPD, gastroesophageal reflux disease, bronchiectasis, erdosteine, spirometry, SGRQ, quality of life.

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