

Title: Efficacy of administration of 0.02% solution of decamethoxine via nebulizer in patients with infectious exacerbations of COPD

Body: Background. Drug delivery via nebulizer is highly effective in patients with various respiratory diseases. In randomized placebo-controlled study we evaluated the efficacy of 0.02% solution of decamethoxine delivered via nebulizer, which has high antiseptic, antimicrobial and antiviral activity, in patients with acute infectious exacerbations of COPD. Also decamethoxine has additional anti-inflammatory and bronchodilatory effects. Methods. 85 eligible patients were randomized to receive 2 ml of 0.02% solution of decamethoxine via nebulizer 2 times/day (n=45) or placebo (n=40) in addition to standard therapy with β2-agonists, antibiotics, mucolytics etc. Results. In patients of the main group the mean time of hospitalization was 4.3 days shorter than in placebo. Disappearance of fever in the group of decamethoxine was reached earlier (on 1.6 day vs. 2.3 day in control). Disappearance of moist wheezing in the group of decamethoxine was reached earlier also (on 4.6 day vs. 6.9 day in control). Conclusions. This study demonstrated that adding decamethoxine via nebulizer to standard therapy of infectious exacerbations of COPD can improve the results of treatment and reduce the time of hospitalization.