

EFFECTIVENESS OF SEPARATE USE OF INHALED LONG-ACTING BRONCHODILATOR AND INHALED CORTICOSTEROID IN PATIENTS WITH SEVERE COPD

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Abstract

Aim of the study — to evaluate the effectiveness of separate use of inhaled formoterol fumarate and fluticasone propionate, delivered via new generation inhaler Cyclohaler, as a maintenance therapy in COPD patients with severe obstructive air flow limitation.

Material and methods. 40 non-exacerbation COPD patients were enrolled. Mean age was $(67,3 \pm 2,9)$ years, smoking history — $(30,4 \pm 4,7)$ pack/years, disease duration — $(9,6 \pm 1,2)$ years, number of exacerbations per year — $(2,3 \pm 0,2)$. Mean FEV1 — $(33,7 \pm 4,2)$ % post bronchodilator. Bodyplethysmography, lung diffusion test, blood gases, 6-minute walk test, mMRC and SF-36 questionnaires were used. All tests were performed thrice: initially, after wash-out period and after 4-week study treatment.

Results. Separate use of Flutixon and Zafiron in COPD patients with severe obstruction helps to achieve fast pulmonary ventilation and diffusion improvement, increase blood oxygenation and exercise tolerability, improve psycho-emotional and physical condition of patients. Due to novel inhaler benefits the use of medications is easy. One inhaler for two drugs improves compliance and decreases the rate of side effects. Novel formulation of inhaled corticosteroid allows two-fold reduce of total daily dose.

Conclusion: separate administration of long-acting beta-agonist and inhaled corticosteroid combination via one inhaler could be recommended as an alternative for fixed combination in management of severe COPD patients.

Key words: chronic obstructive pulmonary disease, formoterol fumarate and fluticasone propionate, separate use via one inhaler.

Ukr. Pulmonol. J. 2015; 4: 13–18.

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