

THE EFFECT OF INHALED CORTICOSTEROIDS ON AIRWAY INFLAMMATION AND LUNG FUNCTION IN PATIENTS WITH MODERATE OBSTRUCTION IN COPD

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The inflammatory cells (IC) and cytokines play an important role in the assessment of inflammation intensity in COPD.

The aim of the study was to evaluate the relationship between the percentage of IC, concentrations of cytokines, thickness of reticular basement membrane (RBM) and parameters of pulmonary function test (PFT) in patients with moderate obstruction in COPD.

Material and methods. Twenty four patients with COPD were included into the study. They had a PFT, bronchofiberscopy with BALF and bronchial biopsy procedure, before and 12 months after the inhaler treatment in the group of (ICS-) n=13 (cholinolitic and LABA), and (ICS+) n=11 (cholinolytic, LABA and ICS).

Results. There were correlations between the cytokines, FVC and FEV1 in patients (ICS-) whereas in (ICS+) between IC and plethysmography parameters there were no correlations between EC and LFT before and after the treatment respectively. One year treatment resulted in reduction in RBM thickness, without correlations with PFT in both groups.

Conclusions. IC and cytokines have a significant impact on the referred FEV1 obstruction. Additional ICS treatment contributes to reductions in the thickness of the RBM, which has no bearing on the degree of obstruction but may have an influence on the degree of dynamic hyperinflation.