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Title: The influence of smoking on the level of proinflammatory cytokines in patients with COPD

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Body: Smoking is a major risk factor for COPD. The mechanisms of the effect of smoking on the progression of the disease is not fully understood. The purpose of: To identify the relationship of smoking and the activity of local and systemic inflammation in patients with COPD. A total of 98 patients, 76 of them smokers with an average experience of smoking a pack of 25 ± 1,8 / year. Revealed that smokers C-reactive protein blood (12,7 ± 4, 5 mg / L), TNFα from bronchial washings (6,3 ± 1,9 pkg / ml) and TNFα from serum (12,19 ± 4, 0 pkg / ml) significantly ($p < 0,005$) higher than in nonsmokers (3,15 ± 0,94 mg / L, 2,15 ± 1,8 pkg / ml, 8,57 ± 4,03 pkg / ml respectively). At the same time in smoking patients was significantly greater neutrophils in sputum and sputum IL-8. There were significant ($p < 0,005$) negative correlation between the level of IL-8 in sputum, and FEV1 ($r = 0,363$). Conclusion. The study allowed to identify and confirm the relationship of smoking to the presence and activity of inflammatory process local and systemic in patients with COPD.