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**Title:** Decrease in a quantity of the eosinophils in bioptates of the mucosa of bronchial tree of patients with bronchial asthma associated with stressful life events

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**Body:** It is found in the investigations of the relation between stress and inflammation, that psycho-emotional stress strengthens a production of cytokine and inflammation mediators. The aim: To study the special features of the cellular contents of bioptates of the mucosa of bronchi of patients with bronchial asthma (BA) associated with psychological stresses. Twenty eight patients with BA were investigated. They were divided into 2 groups with 14 persons in each group. The first group included patients in whom the first episode of the disease were associated with stressful life events. The second group included 117 patients in whom the disease was not linked to psychological factors. The fibrobronchoscopy with taking bioptates of the mucosa of bronchial tree with following quantitative estimation of its cellular contents was inspected for all patients. Results: Patients in the first group had significant decrease of lymphocytes than in the second one (the medians are 18.98% and 26.66%, correspondingly,  $p=0.03$ ), and, especially, eosinophiles (the medians are 0.98% and 2.00%, correspondingly,  $p=0.007$ ) in the own plate of the mucosa of bronchi. Ratio of other inflammation cells changes nonessentially in both groups. Conclusion: Psycho-emotional triggers can modulate the inflammation reaction of the mucosa of bronchi of PIBA patients decreasing a participation of lymphocytes and, especially, eosinophiles in this reaction.