

DOI: 10.5152/TurkThoracJ.2019.253

[Abstract:0341] PP-008 [Accepted:Poster Presentation] [Lung Pathology]

Pulmonary Arterial Hypertension in Patients with Chronic Obstructive Pulmonary Disease Combined with Lung Tuberculosis

Jeyhun Mokhubbat İsmiyilzada, Rafiq Idris Bayramov

Department of Lung Diseases, Azerbaijan Medical University, Baku, Azerbaijan

Objectives: Pulmonary arterial hypertension (PAH) one of most common complication of chronic destructive lung tuberculosis (CDLT) and chronic obstructive pulmonary disease (COPD) which may have led to the death of patients with pathology. The reference dates according to identification of biomarkers of PAH in patients with CDLT+COPD are limited and the role of some biomarkers is insufficiently addressed.

Methods: To examine the role of NT-pro brain natrium uretic peptide (NT-proBNP) interleukin-6 (IL-6), tumor necrosis factor- (TNF-), and C-reactive protein (CRP) as predictors for identification and severity of PAH in patients with CDLT+COPD. using diagnostic-based approaches included immunochemistry, high-resolution computed tomography (HR-CT) Doppler echocardiography (Doppler-Eco) we characterized the biomarkers directly identifying the risk for development of PAH in patients with chronic lung tuberculosis.

Results: The risk for development of PAH in patients was learned by assessing of proinflammatory cytokines (IL-6, TNF-) and proinflammatory peptides (CRP, NT-pro BNP). Depends on volume of irreversible morphological changes related lung tuberculosis all patients were divided in two groups: 1) 26 patients with CDLT+COPD and with PAH, 2) 25 patients with CDLT+COPD without PAH. All patients were smokers and all patients has been admitted to the Departments of Medical University.

Conclusion: Our data reveal that proinflammatory cytokines (IL-6, TNF-) and proinflammatory peptides (CRP, NT-pro BNP) may play role as predictors for assessment of development severity of PAH in patients with CDLT and COPD. Our study also shown that the high level of proinflammatory cytokines and peptides is associated with more severe PAH in patients.

Keywords: Chronic obstructive pulmonary disease, chronic destructive lung tuberculosis, pulmonary arterial hypertension, proinflammatory cytokines and peptides