DOI: 10.5152/TurkThoracJ.2019.260

[Abstract:0815] PP-021 [Accepted:Poster Presentation] [Lung Pathology]

Endobronchial Alterations in Patients with Bronchiectasis and Chronic Obstructive Pulmonary Diseases

Sevda Ibrahim Mustafayeva, Gulzar Rafig Aliyeva, Agca Sabir Abbasova

Pulmonology Department, Research Institute of Lung Disease, Baku, Azerbaijan

Objectives: To study the peculiarities of endobronchial alterations in patients with bronchiectasis and COPD.

Methods: There are 32 patients (age 38-62 years old; 28 men, 4 women) with bronchiectasis and COPD were investigated. All patients underwent a comprehensive examination including X-ray and CT scan of chest organs, respiratory function tests, ECG, Echocardiography, bronchoscopy, microbiological sputum and bronchoalveolar lavage (BAL) analysis, cytological evaluation of BAL. 11 patients have unilateral and 21 patients have bilateral bronchiectasis. In 26 cases lower lobe lesions were detected; at 6 cases bronchiectasis were disseminated over. Flexible bronchoscopy was conducted transnazal or peroral under anaesthesia. All patients got a 1-2 dose of salbutamol inhalation 10-15minutes before the bronchoscopy.

Results: Endoscopy image was almost normal at 4 patients with unilateral bronchiectasis. The mucous membrane of a trachea and large bronchial tubes had light pink colour, bronchial cartilages were distinctly differentiated, and paths of bronchial tubes and interbronchial spurs had the usual form and the size. At 8 patients the cataral endobronchitis has been diagnosed. At 5 unilateral puromucous endobronchitis, and at 10 patients bilateral puromucous endobronchitis was detected. The endoscopic image at other patients was characterized by diffuse purulent endobronchitis. There were all signs of various degree of active inflammatory process at patients. Hyperemia was found at 19 patients; in 9 cases it was considerable and combined with the mucous hypostasis. Also the bronchoscopy revealed mucosal edema of multiple-branched bronchi in most of patients. In the trachea and the bronchial paths some quantity of a mucous secret was found. There was the puromucous secret in the path of bronchial tubes, in 8 cases the secret filled up almost all visible paths of segmental and sub-segmental bronchus.

Conclusion: Thus, the various degree of endobronchial inflammatory changes occurs at the majority of patients with bronchiectasis and COPD. The narrowing and obturating the bronchial paths by the bulk of a dense purulent secret lead to development and progressing of respiratory insufficiency. Exacerbations of both diseases can be precipitated by these factors.

Keywords: Bronchiectasis, COPD, bronchoscopy