European Respiratory Society Annual Congress 2013

Abstract Number: 321

Publication Number: P3762

Abstract Group: 1.4. Interventional Pulmonology

Keyword 1: Bronchoscopy Keyword 2: Critically ill patients Keyword 3: COPD - exacerbations

Title: Role of bronchoscopy in treatment of plastic bronchitis

Dr. Valentina 2569 Molodtsova dr-molodtsova@mail.ru MD ¹ and Dr. Svetlana 2570 Sobchenko dr-molodtsova@mail.ru ¹. ¹ Laboratory of Bronchology, Research Institute of Pulmonology Pavlov State Medical University, St. Petersburg, Russian Federation .

Body: Aim: diagnosis and therapy of plastic bronchitis using bronchofibroscopy (BFS) with endobronchial administration of mucolytics. Methods. Efficiency of different bronchoscopic methods was analyzed in therapy of 20 pts (6 men, 14 women) with plastic bronchitis who were observed from 1990 to 2012. The average age was 40,2 yr (21-63 years). X-ray study revealed signs of bilateral lower lobar pneumonia (1 pt), segmental atelectasis in right lung (11 pts) and left one (9 pts). Results. In all pts diagnostic BFS revealed hyperemia, thickening of mucosa, narrowing and swelling of mouths of lobar and segmental bronchi in sites of occlusion with dense, rubbery-like, mucous content that is not amenable to vacuum aspiration. Occlusion of mouths of segmental bronchi B8-10 was observed in 11 pts. Casts were removed from segmental bronchi (6 pts) and middle-lobar bronchus (2 pts). Therapeutic BFSs (2-5) with segmental bronchoalveolar lavage with saline in combination with bronchodilators and mucolytics were performed in all pts. With no effect casts of bronchial tubes were removed with forceps, brush, balloon Fogarty. One pt was subjected to rigid BFS to retrieve the large cast from middle-lobar bronchus. As a result of endobronchial therapy the full recovery of bronchial lumens was achieved in all pts. The complete unfolding of atelectasis was confirmed by X-ray and CT scan of the chest. Conclusion. Plastic bronchitis with bronchial casts that occlude lumens of segmental bronchi is a rare disease. Often they appear in ineffective treatment of long course of asthma and COPD exacerbations. Therapeutic BFS with using mucolytic drugs is the gold standard treatment for pts with plastic bronchitis.