DOI: 10.5152/TurkThoracJ.2019.339

[Abstract:0328] PP-223 [Accepted: Poster Presentation] [Clinical Problems - Other]

Airway Obstruction in A Young Patient: A Case Report

Selin Ercan[1], Selin Çakmakcı[1], Bahri Akdeniz[2], Gökçen Ömeroğlu Şimşek[1], Aylin Özgen Alpaydın[1]

[1]Department of Pulmonary Diseases, Dokuz Eylül University School of Medicine, İzmir, Turkey
[2]Department of Cardiology, Dokuz Eylül University School of Medicine, İzmir, Turkey

A 20-year-old female patient was admitted to our clinic with complaints of wheezing, coughing and shortness of breath. She had a history of bronchiolitis at the age of 8 months and received oxygen therapy with helmet in infancy. The patient has a known mild mental retardation has never been examined. Neither her mother during pregnancy nor she had active or passive cigarette smoke exposure. No history of tuberculosis or pneumonia. There was no history of biomass exposure, pet feeding or medicinal herb use. Physical examination revealed patient's dysmorphic face, avoiding eye contact, lack of speech, and truncal obesity. Bilateral expiratory diffuse rhonchi was detected in the auscultation of respiratory system. Thoracic computed tomography of the external center revealed diffuse mosaic attenuation, emphysematous parenchymal findings and bronchiectatic changes in lower lobes in both lungs. Result of respiratory function test (RFT) performed in our center was FVC:1.1 L, 33% FEV1:0.77 L, 27% FEV1/FVC: 69.8%, and reversibility was negative. In arterial blood gas, pH:7.411, pCO_2:42.8 mmHg, pO_2:79.6 mmHg, Lac:1.7 mmol/L, HCO_3:26.4 mmol/L, O_2Sat:%96.2. The patient was examined in the light of all the history given by above. The enzyme level for Alpha-1 Antitrypsin (α-1 AT) deficiency was found to be within normal limits. Transthoracic echocardiography and coronary angiography were performed for pulmonary artery agenesis. Valve pathology was not detected, mean pulmonary artery pressure was found normal and coronary angiography revealed the main pulmonary arteries, pulmonary vascular structures were decreased, perfusion limitation was noted and it was thought to be congenital. Pulmonary ventilation/perfusion scintigraphy revealed multiple segmentary-subsegmentary hypoperfusion areas in both lungs. In the light of all these data, congenital lobar emphysema and bronchiolitis obliterans were considered. Mucolytic, inhaled bronchodilator and inhaled steroid were given. In controls, her complaints decreased and rhonchus receded. Bronchiolitis obliterans (BO), also known as constrictive bronchiolitis, is a fibrosing form of obstructive pulmonary disease that follows a severe insult lower respiratory tract infections. The most common reason of BO is infantile infections. Congenital lobar emphysema is a rare disease characterized by hyperinflation of lung, usually beginning at an early age but extending to adulthood. Dyspnea as severe as neonatal distress syndrome, hyperinflation of lung lobes, and cardiac malformations cause significant morbidity and mortality. Bronchiolitis obliterans congenital and lobar emphysema should be kept in mind in patients with non-smoker, non-biomass exposure and respiratory symptoms starting in the pediatric period.

Keywords: Congenital lobar emphysema, emphysema, bronchiolitis obliterans