Alectinib Induced Interstitial Pneumonitis / ILD

M. Radhakrishnan¹, P. Tewari¹, M. Alkhathlan², Y. Yoon³; ¹Pulmonary, critical care & sleep medicine, University of Toledo medical center, Toledo, OH, United States, ²Internal medicine, University of Toledo medical center, Toledo, OH, United States, ³Univ of Toledo Coll of Med, Toledo, OH, United States.

Adverse drug reactions due to antineoplastic agents is relatively common and lungs are frequently involved. Cancer treatment nowadays is selected based on individuals tumor molecular features and there is more frequent use of monoclonal antibodies, TKI, ALK inhibitors etc. ALK inhibitors like alectinib are approved for treatment of advanced or metastatic non-small cell lung cancer if the tumor contains EML4-ALK fusion oncogene. All drugs in this class have been associated with development of ILD/pneumonitis. Usually, ILD/pneumonitis develops within 3 months of initiating therapy. Permanent discontinuation of ALK inhibitors is advised in the event of treatment-related ILD pneumonitis of any grade. In this case we discuss a patient with past medical history significant for adenocarcinoma of the lung (NSCLC (Adeno) LUL (2/16/18).PD-L1 1-49%.ALK+.EGFR (-).ROS1(-).BRAF (-).MET (-) Her-2(-)). Currently on treatment, papillary thyroid carcinoma status post total thyroidectomy, prostate cancer status post RT in 2003, CKD stage III, atrial fibrillation on chronic Coumadin therapy and CAD with history of CABG in 2007, and a history of TIA who presented to the ED on 8/05/2019 with c/o shortness of breath, wheezing, nonproductive cough, low-grade fever and hypoxia [87% on room air]. He had a CT scan of the chest done which showed a mass like consolidation in the left upper lobe which was present from before along with new pulmonary nodules and GGO. He was started on IV steroids and antibiotics for community-acquired pneumonia. His symptoms and hypoxia improved rather rapidly which would lead us to believe that he responded to the steroids. We reviewed all his prior imaging and felt that the changes on his CT chest was probably secondary to drug-induced pneumonitis/ILD. He was also seen by oncology while he was in hospital. He was discharged from hospital on 8/8/19 for further management as an outpatient. We did recommend that he consider discontinuing treatment with alectinib and following up with his oncologist to start appropriate therapy as an outpatient. This case highlights the importance of looking for drug-induced lung injury, detecting them early and intervening appropriately to prevent significant lung injury. Although, there have been reports of ILD associated with ALK inhibitors, alectinib induced interstitial pneumonitis/ILD is not very common.