

LONG-TERM RESPONSE WITH NIVOLUMAB IN A PATIENT WITH SIMULTANEOUS ADENOCARCINOMA AND SQUAMOUS CELL CANCER ORIGINATING FROM THE LUNG

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Introduction - Purpose : Simultaneous adenocarcinoma and squamous cell carcinoma of the lung is a rare. PD-1 antibodies are effective treatments for both histological types of lung cancer. We report a case of simultaneous adenocarcinoma and squamous cell carcinoma of the lung with prolonged survival with nivolumab.

Findings : Case: 62-year-old male patient applied to a hospital with complaint of hemoptysis. The patient's history was weight loss about 8 kg for the last 4 months and he has smoker about 50 pack/years. Chest x-ray showed a mass in the left upper lobe of the lung. PET-CT revealed a mass in size of 67x51x70 mm in the left upper lobe SUV max: 49.6) and subpleural nodule (20x15 mm and suv max: 11.6) at the posterior lobe in the right hemithorax and multiple mediastinal pathologic lymph nodes. During bronchoscopy the left upper lobe bronchi was almost completely obstructed by lesion. Biopsy was performed and pathological examination of the specimen revealed squamous cell carcinoma. The patient received cisplatin-gemcitabine therapy. After 3 cycles of the combined chemotherapy regimen, PET-CT was done. PET-CT showed partial regression by more than 70% for mass in the left upper lobe, but mass in the right lobe progressed and a new metastatic lesion was detected at segment 7 of the liver, in size of 13 mm. Trucut biopsy from a mass at the right upper lobe was performed. The diagnosis was confirmed secondary primary lung cancer with adenocarcinoma histology. EGFR, ALK and ROS1 were negative. Pemetrexed was started because the diagnosis have progressed after platinum-based chemotherapy. The tumor continued to grow after 4 cycles. In November 2015, he received Nivolumab for every 2 weeks. After 8 cycles of Nivolumab, serum thyroid-stimulating hormone level increased. However, serum creatinine was higher (1.29 mg/dL) and CEA reduced from 104 to 2.2 U/ml. Thyroid replacement therapy was started and nivolumab was continued. Partial response to treatment was observed and treatment was decided to be continue. In July 2017, the patient received 45 cycles Nivolumab. The computed tomography showed stable disease with 17 mm nodule in the left upper lobe and bilateral subpleural nodules.

Discussion : Discussion Nivolumab which is a PD-1 antibody, associates with improved overall survival in patients with lung cancer. The drug is an effective treatment for both adenocarcinoma and squamous carcinoma histology. In our case, we reported a patient with lung cancer with prolonged progression-free survival with nivolumab.

Keywords: Lung cancer; adenocarcinoma; squamous cell cancer; nivolumab