

DOI: 10.5152/TurkThoracJ.2019.322

[Abstract:0501] PP-187 [Accepted: Poster Presentation] [Clinical Problems - Diffuse Parenchymal Lung Diseases]

Drug-Induced Pulmonary Toxicity: Two Years of Experience

Fatma İşıl Uzel, Sinem İliaz, Benan Çağlayan

Department of Pulmonology, Koç University School of Medicine, İstanbul, Turkey

Objectives: The number of chemotherapeutic, biological agents and targeted treatment options used in oncologic and hematological diseases is increasing. The lungs are the targets of the drugs related to the drugs and the toxicities of the drugs are encountered in the practice of Chest Diseases and it is possible to prevent the damage by early diagnosis and appropriate treatment. We aimed to present our patients who were followed up and treated with a diagnosis of drug-induced lung toxicity.

Methods: Between January 2017 and January 2019, 28 patients with hematological and solid organ malignancies who were followed-up and treated with drug-induced lung toxicity were retrospectively evaluated. Demographic features, radiological findings, pulmonary function tests, treatment doses and durations, treatment results were calculated with IBM SPSS version 24.

Results: The mean age of the patients was 50.82 ± 12.54 , and the F/M ratio was 13/15. 11 patients (39.3%) were treated with Hodgkin lymphoma, 3 patients (10.7%) with NHL, 3 patients (10.7%) with testicular tumors and the remaining 11 patients were treated for different solid organ tumors. Of the drug toxicity, 13 (46.4%) had bleomycin, 6 (21.4%) had monoclonal antibodies, 3 had targeted therapies, 3 had autologous stem cell transplantation and 3 had other chemotherapeutics. Symptoms of toxicity were dry cough and shortness of breath. FVC $71 \pm 23.7\%$ FEV1 $70\% \pm 23.7\%$ FEV1/FVC at the time of toxicity diagnosis was $82 \pm 10\%$ DLCO $61 \pm 16\%$ DLCO/VA was $76 \pm 18\%$. According to thorax HRCT and PET_BT findings, the most common appearance was ground glass (n=16; 57.1%) and interseptal thickening/reticulation. Systemic methylprednisolone treatment with the dose of 0.5-0.75 mg/kg/day was started in the patients diagnosed with drug toxicity. The duration of steroid use was 2.4 ± 1.4 months for patients. In the first month follow-up, DLCO increase was 17% and FVC increase was 14%. A maximum of 2 side effects were observed. Because of side effects, steroid treatment was discontinued in 1 patient. 11 patients (40%) had complete functional and radiological improvement, 7 (25%) had sequelae, and 1 had unresponsiveness. Five patients (17.9%) died. Treatment of 4 patients is ongoing.

Conclusion: In the presence of toxicity, it was observed that the removal of responsible agent, and systemic steroid treatment provided improvement in the symptoms, FVC and DLCO levels in the first month. Close follow-up, monitoring of the patients is important in diagnosis and timely treatment of drug toxicities.

Keywords: Chemotherapy agents, toxicity, lungs