Abstracts
22nd European Conference on General Thoracic Surgery June 15-18, 2014, Copenhagen, Denmark

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NEOADJUVANT CHEMORADIATION VERSUS CHEMOTHERAPY FOLLOWED BY SURGERY FOR NON-SMALL-CELL LUNG CANCER: DOWNSTAGING FROM STAGE IIIA TO STAGE I
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Objectives: Chemoradiation increases the complete sterilization rate of mediastinum as well as the tumour compared to neoadjuvant chemotherapy in patients with non-small-cell lung cancer (NSCLC). However, late complications of radiotherapy may cause early deaths that escape from mortality rates. In this study we aimed to show the prognostic effects of neoadjuvant chemoradiation in patients with stage IIIa NSCLC that was downstaged to stage I (T0-2N0).

Methods: We retrospectively evaluated the data of 422 patients undergoing lung resection after neoadjuvant therapy between 1996 and 2013. Among these cases; 147 cases downstaged from stage IIIa to I. All but 9 patients were male with a mean age of 58 years (36-85 years). The pathological examination revealed complete response in 45 patients (T0N0), T1N0 in 47 patients and T2N0 in 55 patients. Neoadjuvant treatment was chemotherapy in 77 (group I) and chemoradiation in 70 patients (group II). Both groups were compared for morbidity, 90 days mortality and long-term survival. Mortality that occurred between 90 days and one year was also recorded and compared between the groups.

Results: Complete response or downstaging to stage I was superiorly achieved by chemoradiation (70%) compared to chemotherapy (30%), \( P = 0.02 \). The one-year mortality was observed in 8 patients (10%) in group I and only in three patients (4.2%) in group II. Morbidity observed in 27.9% of patients with a 90-day mortality of 2% (2.5% in group I and 1.4% in group II). Five-year survival rate was 62.7% in group II and 44.5% in group I, \( P = 0.03 \). Multivariate analysis revealed that the complete response rate was the only prognostic factor in the groups.

Conclusions: Adding radiotherapy to neoadjuvant chemotherapy increases complete response rate and downstaging ratio in patients with stage IIIa NSCLC. Excellent long-term survival without postoperative mortality was achieved in patients treated with neoadjuvant chemoradiation and surgery.

Disclosure: No significant relationships.