

Carboplatin and etoposide followed by once-daily thoracic radiotherapy in limited disease small-cell lung cancer: unsatisfactory results

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ABSTRACT

Aims and background. There has been a trend to replace cisplatin with carboplatin in the treatment of small-cell lung carcinoma. The goal of the present study was to determine the efficacy of carboplatin and etoposide followed by thoracic radiotherapy in patients with previously untreated limited disease small-cell lung carcinoma.

Methods. From February 2001 to March 2007, 47 patients with limited disease small-cell lung cancer were enrolled in the study. Etoposide, 100 mg/m², was administered intravenously on days 1-3 in combination with carboplatin, AUC 6, on day 1 every 21 days for 6 cycles. In cases considered to have non-progressive disease following induction chemotherapy, thoracic radiotherapy was given with in a once daily fraction of 2.0 Gy, 5/wk, up to 50-60 Gy.

Results. Forty-one patients were evaluated. Median age was 62 (range, 40-78), 88% of patients were male. ECOG PS was 0-1 in 38 patients. Seven of the 41 patients (17.5%) had pleural effusion (one malignant) and 7 patients (17.5%) had involved supraclavicular lymph nodes. Ninety percent of patients had elevated serum lactate dehydrogenase levels. Median follow-up was 13.5 mo. A total of 209 cycles of chemotherapy was administered (median, 6; range, 1-6). Thoracic irradiation was given to 33 patients. The overall response rate to combined modality on an intention-to-treat basis was 73%. Median survival time was 13.7 months (95% CI, 10.3-17.1), and median progression-free survival was 9.5 months (95% CI, 8.6-10.4). Two- and four-year overall survival was 23% and 7%, respectively. Grade 3-4 neutropenia and leukopenia were the most common adverse events and occurred in 46.0% and 24.0% of the patients, respectively. Six (14%) patients experienced febrile neutropenia. Three patients (7%) died of sepsis and neutropenic fever. Non-hematological toxicities were mild.

Conclusions. Carboplatin and etoposide chemotherapy followed by thoracic radiotherapy in LD-SCLC appears to be unsatisfactory. **Free full text available at www.tumorionline.it**

Key words: cancer, carboplatin, radiotherapy, survival.

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