Conclusions: Induction erlotinib therapy in IIIA-N2 NSCLC with EGFR activating mutation is a promising strategy. The study is planned to start in Sep. 2011.

9036 POSTER

Population-based Outcomes of Limited Stage Small Cell Lung Cancer Patients Treated With Cisplatin-Etoposide vs. Carboplatin-Etoposide

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Purpose: Although a previous randomized control trial did not demonstrate an advantage for Cisplatin-Etoposide (EP) over Carboplatin-Etoposide (EC), cisplatin-based therapy remains standard-of-care in North America. This descriptive study compares overall survival (OS) and locoregional recurrence (LCR) between EP and EC at a population level in patients with limited stage small cell lung cancer (LD-SCLC).
Methods and Materials: All patients with LD-SCLC who were diagnosed from January 2006 to December 2008 and treated with EP or EC and concurrent or sequential radiotherapy were identified. A retrospective review examining prognostic features and outcomes was performed. Demographic comparisons were made using Fisher's exact test for discrete variables and Mann-Whitney non-parametric test for continuous variables. Overall Survival (OS) and locoregional control (LRC) curves were calculated using the Kaplan–Meier method.
Results: A total of 168 patients with LD-SCLC was identified. Ninety-eight patients received EP and 70 received EC. Patients treated with EC were significantly older (median age 74 vs. 62, p value <0.0001). Median follow-up time was 22.3 months. Median OS for the EP and EC patients were 21.5 and 22.1 months (p value = 0.63), and the two year OS rates were 41% and 47%, respectively. LRC rates at 6 and 12 months were 98% and 73% for the EP group and 96% and 68% for the EC group (p value = 0.77). The most common prescription used for the thoracic radiotherapy was 40 Gy/15 fractions in 86% of cases. Concurrent radiation was delivered to 104 patients (89%) treated with EP or EC. Fifty six patients had a thoracic recurrence with 33 (28%) being within the radiation field and 23 (20%) being outside the radiation field. Sixty one patients (52%) recurred distantly as the site of first progression.
Conclusion: Despite the preferential use of EC in a more elderly population, the median survival time, two-year survival rates and locoregional control rates were similar to patients treated with EP.

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Induction Chemotherapy With Docetaxel (D) and Cisplatin (C) Followed by Concurrent Thoracic Radiotherapy With Biweekly D and C for Stage III Non-Small Cell Lung Cancer (NSCLC) − a Galician Lung Cancer Group Study

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Background: Concurrent chemoradiation (CChRT) is recommended as the evidence-based approach for the management of patients (p) with locally advanced stage III NSCLC and a good performance status, although a clearly superior regimen has not been identified. D has been shown to possess good single agent activity against NSCLC as well as radiosensiziting properties, both alone and sinergisitically with C. The aim of our study was to evaluate the feasibility of induction chemotherapy with D-C followed by CChRT with biweekly D-C.
Methods: 85 p with inoperable locally advanced NSCLC, stage IIIAN2/IIIB (no pleural T4), were included in a phase II study with induction chemotherapy consisting of three cycles of D 75 mg/m^2 on day 1 and C 40 mg/m^2 days 1−2 every 3 weeks and, if no surgery and no progresion, then underwent CChRT with D 30 mg/m^2 and C 30 mg/m^2 every 2 weeks for four courses, during conformal thoracic radiotherapy (60−66 Gys, 180 cGy/day). The primary objective was overall survival (OS); secondary objectives were progression free survival (PFS), response rate (RR) and toxicity. Median follow-up: 17.6 months.
Results: The p characteristics were: mean age 61.1 years (44−75); male/female 77/8; ECOG PS 0/1 in 25/60 p; squamous/adeno/large cell carcinoma: 51.8%/28.2%/20%; stage IIIAN2 20 p (23.5%) and stage IIIB 65 p (76.5%). 78 p were evaluable for response and 82 p for toxicity. Induction D-C response: 2 CR, 46 PR (RR 61.5%; 95% CI:51−72), 21 SD (26.9%) and 9 PD (11.6%). 9 p were treated with surgery: 1 pCR, 5 pPR, 1 pEE and 2 p unresectable. 56 p completed CChRT and 55 p were evaluable (one toxic death) with 8 CR, 37 PR (RR 80%; 95% CI:70−90), 3 SD and 7 PD. The median PFS was 11 months (95% CI:8−14) and median OS was 19 months (95% CI:14.8–23.2). The PFS and OS at 1/3 years were 46%/14% and 63%/15% respectively. A total of 235 cycles of D-C were given (2.8 per p); main toxicities (NCI-CTC 3.0) per p Grade (g) 1−2/3−4 (%) were as follows: neutropenia 10.9/25.6; anemia 30.4/3.5; nausea/vomiting 30.4/7.3; fatigue 28/0; diarrhea 17/9.7; there were ten episodes of febrile neutropenia and there was one treatment-related death. Main toxicities per p in CChRT (D-C doses: 211, 3.6 per p; mean doses RT: 55.4 Gys) were: g1−2 neutropenia/anemia 12/34.4%; g1−2/3 esophagitis in 51.7/1.7% and g1−2 pneumonitis in 24.5%; there was one treatment-related death.
Conclusions: Induction chemotherapy with Docetaxel and Cisplatin followed by concurrent thoracic radiotherapy with biweekly Docetaxel and Cisplatin is a feasible treatment option for locally advanced stage III Non Small Cell Lung Cancer, showing good clinical activity and tolerability with acceptable long-term survival.

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Radiofrequency Ablation Combined With Conventional Radiotherapy − a Treatment Option for Patients With Medically Inoperable Lung Cancer

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Background: To evaluate the effectiveness of lung radiofrequency ablation (RFA) followed by conventional radiotherapy in medically inoperable stage I non-small cell lung cancer and the extent of treatment related morbidity.
Methods and Materials: Between June 2003 and July 2010 we treated a series of 10 patients with medically unresectable stage I (T1-T2aN0M0) lung cancer: 9 male and 1 female, with a mean age of 75.8 (range: 65−89). The mean follow-up period was 22.1 months (range: 5 to 77). Patients were considered non surgical candidates by an interdisciplinary group because of age, insufficient respiratory reserve and comorbidity (mainly cardiovascular disease). RFA was performed under conscious sedation using CT fluoroscopy guide. Radiation was performed with 25 fractions of 2.5 Gy per fraction for a total of 62.5 Gy. Evaluation of the therapeutic effects was determined using contrast enhanced CT scans taken every 6 months and PET/CT in some cases.
Results: There were minor complications after RFA as pneumothorax (2) and pleural effusion (3) without requiring chest tube. There were no cases of symptomatic pulmonary toxicity secondary to radiotherapy. There were no lung cancer-related deaths. Two patients died of respiratory failure secondary to COPD exacerbation and one case due to bleeding in the upper digestive tract. There was no evidence of local recurrence. Two patients developed metastases in lung (1) and adrenal glands (1) treated with chemotherapy.
Conclusions: Combined CT-guided RFA and conventional radiotherapy in medically inoperable patients is a safe modality for the local control of stage I lung cancer better than radiotherapy alone. Randomized studies are needed to know if there is a survival improvement.

9039 POSTER

The Burden of Mesothelioma Mortality − Estimation as the First Step to Prevention

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Background: Mesothelioma is a rare cancer that principally affects the pleura and is almost always caused by asbestos exposure. The disease is rapidly fatal; most of those affected dying within a year of diagnosis. There is a long latent period between first exposure to asbestos and diagnosis of mesothelioma that is seldom less than 15 years and often exceeds 60 years. Mesothelioma incidence has increased in South East England of which East Kent is a major part, particularly for men aged over 70 years, reflecting areas of asbestos use in shipbuilding and industry in the past.
Methods: Work-related cancers are largely preventable. The aim of the study is to estimate the current burden of cancer in the area of East Kent in the UK attributable to occupational factors, and identify carcinogenic agents, industries and occupations for targeting risk prevention.