Methods: Eligible pts had histologic or cytologic diagnosis of PM not amenable to curative surgery. P 500 mg/m^2 alone or in combination with either Cis 75 mg/m^2 or carboplatin (Cb) AUC 5 was given on day 1 of each 21-day cycle, with vitamin B_{12}, folic acid, and dexamethasone. Investigator-determined best response and survival data (with censoring) were recorded at the end of study participation. Myelosuppression data (NCI CTC, version 2.0) were also collected.
Results: In this nonrandomized, open-label study 109 pts received $\geqslant$1 dose of P, P+Cis, or P+Cb and were evaluable for safety; 91 pts were evaluable for efficacy. Baseline characteristics, efficacy, and safety data are summarized in the table. A higher percentage of pts on the P arm received prior therapy, which generally corresponded to greater toxicity.
Conclusions: The results of this large, nonrandomized study confirm that P and P+platinum are efficacious in the treatment of pts with PM. The response results are comparable to those previously reported for the EAP in pts with pleural mesothelioma.

6572 POSTER

Stereotactic body radiotherapy (SBRT) for lung cancer: Clinical experience for medically inoperable lung tumours with excellent local control

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Background: To report clinical results from ours first patients with resecable lung tumours, but clinically inoperable patients, treated with stereotactic body radiotherapy (SBRT) employing hypofractionated high dose fraction schedule.
Material and Methods: Between July 2002 and February 2007, 21 lung tumours patients have been treated using SBRT, all of them resecable, 20 medically inoperable, one operable but with 1 brain metastasis treated with radiosurgery. After immobilization with Stereotactic Body Frame (ELEKTA) we have made 3 CT simulation studies in 1 week and measured the variations in CTV and organs and calculated the position statistical variability to determine the PTV for each patient. All patients have been treated with 6 to 12 coplanar or no coplanar conformed beams (average 8.2 beams), 3 fractions in 1 week, the dose was prescribed to cover PTV with no more margin, T1 with 16 Gy each fraction and total dose of 48 Gy and T2−3 with 14 Gy/fraction and total dose of 42 Gy. Dose calculation included heterogeneity corrections. Follow-up was at 4−6 weeks and then every 3 months.
Results: For 21 patients, median age was 73 years (range 55−84). There were 19 males and 15 (83.3%) smokers. The mean follow-up was 15.8 months (range 1.5−56). All have pathology diagnosis: 8 SCC, 6 ADC, 1 SCLC and 6 non-specifics NSCLC. Pretreatment PET was made in 15 (71.4%) patients. Tumor stages were 10 T1, 9 T2, 1 T3, 1 metastasis, 1 local relapse. Four patients (19%) received previous cisplatin-based chemotherapy. All lesions were resecable, but 20 patients (95.2%) were medically inoperable. All SBRT was completed without interruptions. GTV mean volume was 16.2 ml (95% CI: 8.8−23.6), PTV mean volume was 52.2 ml (95% CI: 30.5−73.9). There was no acute esophagitis, one patient develops acute pneumonitis and no delayed lung toxicities were found. At the moment, only 10 patients were evaluated for response: 7 (70%) complete responses, 2 (20%) partial responses and 1 (10%) stable disease. No patient failed locally and only 2 patients (9.5%) developed distant metastasis.
Median survival was 30 month (95% CI: 9.2−50.8). Overall survival at 12 and 18 months were 83.9% (95% CI: 83.7−84.1) and 67.1% (95% CI: 66.8−67.4), respectively.
Conclusions: SBRT for lung cancer demonstrates a high response rate and excellent local control and survival. There are minimal toxicities and no treatment related deaths.

6573 POSTER

Clinical evidence for the radiosensitivity of mesothelioma following postoperative image-guided radiotherapy

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Background: The increasing incidence of mesothelioma presents a serious problem around the world with no standard therapy and no treatment proven to offer durable benefit. The high mortality rate has not significantly improved with radical surgery or new systemic therapies, but there is growing evidence that a trimodality approach using postoperative radiotherapy may be curative in selected patients. Mesothelioma is characterized by relentless locoregional growth that spreads beyond the scope of surgery, and it is timely to evaluate newer techniques of image-guided radiotherapy (IGRT) in this disease.
Objective: To document locoregional control from high dose postoperative radiotherapy in pleural mesothelioma patients who have PET scans accurately reflecting disease distribution.
Materials and Methods: Thirteen consecutive patients were treated with postoperative radiotherapy to regions of residual disease with doses of 45 to 60 Gy, after pleurectomy/decortications from 2003 to 2006. 3D-conformal or intensity-modulated radiotherapy techniques were used with PET/CT fusion IGRT. All had pre-treatment PET scans showing ^{18}FDG-avid disease, and post-treatment imaging including followup PET or PET/CT scans in 10 cases. All but one received intraoperative phototherapy. Ten had epithelioid and 3 had biphasic mesothelioma.
Results: There were no in-field relapses within the planning target volume (PTV) confirmed with PET scan co-registration, resulting in a local control rate of 100% at a median followup of 10 months post-radiotherapy. Relapses outside the PTV were found in 11 cases, all in multiple sites. Many were in areas deemed at moderate risk but not included in the PTV due to strict dose constraint criteria required to minimize the risk of major radiation toxicities.
No patient died as a consequence of radiotherapy. Radiation morbidity was seen in two cases, with transient grade 2 pneumonitis and liver injury, both patients remaining well and disease-free 30 months after surgery. Six received palliative chemotherapy for distant relapse and only 1 had neoadjuvant chemotherapy. Additional palliative radiotherapy was given in 2 cases.
Conclusions: Mesothelioma appears to be a radiosensitive disease that can be locally controlled by radiation doses of 50 Gy in conjunction with debulking surgery. Using modern technological advances in planning and delivery, radiotherapy can be administered safely and accurately without significantly damaging surrounding tissues.

6574 POSTER

A phase I/II study on stereotactic body radiotherapy for stage I non-small cell lung cancer

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Background: The outcome of stage I non-small cell lung cancer (NSCLC) patients treated with conventional radiotherapy is inferior to that of the patients treated with surgery. The aim of this study is to evaluate the clinical outcome of stereotactic body radiotherapy (SBRT) in the treatment of stage I NSCLC.
Materials and Methods: We performed SBRT on 31 patients with stage I NSCLC. Of the 31 patients, 20 were medically inoperable, and 11 refused surgery. Nineteen tumors were T1 stage masses and 12 tumors were T2. The median tumor size was 25 mm. SBRT was delivered at 45 Gy/3 fractions except in cases in which the tumor was close to an organ at risk, in which case we used 60 Gy/8 fractions. The radiation target was the primary tumor, and photon energy was 6 MV in all cases.
Results: The median duration of observation for all patients was 32 months (range 4−87 months). The 5-year overall and cause-specific survival rates were 48.9% and 62.6%, respectively. In 9 of the 31 cases, there was evidence of local recurrence. The local control rate of T1 tumors was 84.2% (16/19 cases) and of T2 tumors, 50.0% (6/12 cases). Five patients developed acute pulmonary toxicity greater than grade 2, although the symptoms improved with medical treatment.
Conclusions: SBRT was shown to be an effective treatment for stage I NSCLC patients, although the local control rate for T2 tumors was low. A more intensive treatment regimen should be considered for T2 tumors because no severe toxicity occurred.

6575 POSTER

Is there still a place for surgery in the treatment of locally-advanced non-small cell lung cancer (IIIA, N2)?

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Background: Surgical resection for patients with stage IIIA (N2) non-small cell lung cancer (NSCLC) results in disappointing 5-year survival