

Results: A better clinical response was observed in fit patients as compared both to intermediate and frail patients. Treatment toxicity was significantly worse for intermediate patients as compared to fit and frail patients. The correlation analysis showed a significant direct correlation between clinical response, CGA category and dose intensity; then, the multivariate regression analysis showed that the only independent predictive variables of clinical response were CGA category at baseline and dose intensity.

Conclusions: The main conclusion of our study is that the CGA category is the only true independent variable predictive of clinical outcome, as the other variables (dose intensity and ECOG PS) are correlated to it. The most relevant interest of the study is the new approach in the use of CGA.

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POSTER

First-line chemotherapy with sequential administration of gemcitabine followed by docetaxel in elderly advanced non-small-cell lung cancer (NSCLC) patients: a multicenter phase II study

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Background: Single-agent chemotherapy (gemcitabine or vinorelbine) is currently the standard treatment for elderly advanced NSCLC patients. The combination of gemcitabine+docetaxel was active but not well tolerated in this subset. Modified schedule of docetaxel (37.5 mg/m² on day 1 and 8 every 3 weeks) resulted active and well tolerated in pre-treated elderly advanced NSCLC patients. Aim of this study was to evaluate the activity and the toxicity of a sequential regimen of gemcitabine followed by docetaxel in elderly advanced NSCLC patients.

Materials and Methods: Chemo-naïve elderly patients (>70 years old) with histologically or cytologically confirmed stage IIIB (positive pleural effusion or metastatic supraclavicular lymph nodes) or IV NSCLC and a performance status (PS) 0–2 were treated with gemcitabine 1200 mg/m² on Day 1 and 8 every 3 weeks for 3 cycles followed by, in case of no progressive disease, docetaxel 37.5 mg/m² on Day 1 and 8 every 3 weeks for further 3 cycles.

Results: Fifty-six patients were enrolled into the study: 46 men and 10 women; 13 stage IIIB and 43 stage IV; 7 PS 0, 38 PS 1, 11 PS 2; median age was 75 years (range 70–84). The median number of major comorbidities was 2.

All the patients were evaluable for toxicity and 45 were evaluable for response. Toxicity was mild; afebrile grade 3–4 neutropenia was observed in 4 patients (7.1%) and grade 3 thrombocytopenia in 2 patients (3.6%); no grade 3–4 anaemia was observed. Non-haematological grade 3–4 toxicities were: fatigue in 5 patients (8.9%), diarrhoea in 1 patient (1.8%) and mucositis in 2 patients (3.6%). Nine of the 45 evaluable patients showed a partial response (20%, 95% CI 9.6–34.6%), 17 had a stable disease (37.8%) and 19 a progression (42.2%). Five patients had a conversion from stable disease to partial response by docetaxel.

Conclusion: Sequential chemotherapy with gemcitabine and docetaxel seems active and well tolerated in elderly advanced NSCLC patients. Further data will be presented at the meeting.

This work was partly supported by the Fondazione A.R.C.O.

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POSTER

Liver surgery for elderly in the new millennium: is it feasible?

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Background: Hepatic resections for primary and metastatic tumours are performed with increasing frequency and the limits extending. However, the safety and feasibility of liver surgery in elderly patients is still under debate. The aim of this study was to evaluate the feasibility and outcome of liver resections in the elderly (70 years and older).

Materials & Methods: Between January 1, 1997 and January 1, 2007 a consecutive series of 194 patients underwent 214 liver resections. The group of patients under 70 years served as control group (paediatric patients were excluded). Primary outcome was mortality. Secondary outcomes were complications, hospital length of stay and readmissions.

Results: Forty six elderly patients with a median age of 75 years (range 70–88) underwent partial liver resection. Both groups matched for gender and major/minor resections. Mortality rate was higher in the elderly group compared to the control group [2/46 (4 per cent) versus 1/166 (0.6 per cent)]

but within the range reported in literature. Also, complication rates were higher in the elderly [19/46 (41 per cent) versus 50/166 (30 per cent)]. The median length of hospital stay was 9 days (range 4–82) in the elderly versus 8 days (range 3–81) in the control group. There were 4 re-admissions (9 per cent) in the elderly group compared to 27 (16 per cent) in the control group. None of these differences between the groups were statistically significant.

Conclusion: Hepatic resection can be performed in elderly patients of 70 years and older with an acceptable morbidity and mortality.

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POSTER

Care of elderly patients with cancer: place of geriatric intervention

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Background: A standardized geriatric evaluation is essential for the multidisciplinary discussion of elderly patients with gastrointestinal cancer. A geriatric as well as an oncological evaluation are mandatory to offer to these patients the best therapeutic option and improve their prognosis as well as their quality of life. A Geriatric Intervention Team (GIT) composed by nurses and geriatrician is working in our hospital. One of its function is to evaluate elderly patients with digestive neoplasms in collaboration with the Digestive Oncology unit (DOU).

Methods: The Mini Mental State Examination, the mini-Geriatric Depression Scale and the Get up and go timed test were used for the geriatric evaluation.

Results: GIT was solicited for 124 pts over a 3-year period. Their mean age was 79.1±6.3 years (65–96), 45% were men. The neoplastic localizations were: colorectal (53%), pancreatic (17%), esophagus (11%), hepatic carcinoma (7%) and other (12%). There was a clear prevalence of cognitive disorders identified by the Folstein MMSE. Among 65 workable files (complete MMSE), 61% of the patients had an abnormal (<26). The observation of a time and/or space disorientation was noticed in 30% of the cases. The mini-GDS used to detect depression, was positive in 43% of the evaluations. The Timed Get Up and Go Test was used to evaluate the walking capacity self-sufficiency and the risk of falls. It was superior to 20 seconds in 40% of cases. For 77 geriatrics evaluation, the GIT was solicited before the decision of the best treatment to choose. In this population, we can clearly identify 3 clusters of patients: well-matched patients (34%) who received chemotherapy; intermediate patients (26%) who needed a new geriatric assessment before decision; and frail patients (40%) who received only palliative treatment. In the second group, after geriatrician intervention, 60% of patients finally received a chemotherapy.

Conclusions: These results show the benefit of a close collaboration between geriatricians and oncologist. In the daily management of elderly patients, alteration are at least detected in 55% of patients by geriatric assessment. Moreover, the GIT is allow to securely classify the patients between the 3 categories and help to decision in the intermediate group.

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POSTER

A phase II study with cisplatin (cddp) and gemcitabine (gem) in elderly patients with advanced non-small cell lung cancer

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Background: The incidence of Non-Small Cell Lung Cancer (NSCLC) is increasing among the elderly representing about 30% of NSCLC patients over 70 years-old. Monochemotherapy is actually considered a standard approach in the elderly. The aim of this study was to evaluate the efficacy and tolerability of a modified schedule with CDDP-GEM in elderly pts with advanced NSCLC. On the basis of our previous experience of a dose-finding study we have decided to conduct this phase II trial to test the schedule at the dosage we have demonstrated to be tolerable in this special setting of patients.

Methods: Between June 2004 and December 2006, 30 pts were included in the study. Median age was 72 (range 70–75). Male/female 27/3 (90%/10%); 77% of patients were stage I/II in 10 (33%) pts. We experienced no episode of treatment related deaths. Anemia was a major cause of haematological toxicity with 9 pts affected by grade II anemia. 6 pts (20%) experienced grade III/IV platelets reduction. Non-hematological toxicities

were mild. By intention-to-treat analysis, 12 pts (40%) showed stable disease and 11 (36%) showed a partial response while 5 (16%) showed treatment failure. For two pts evaluation of efficacy was impossible due to early withdrawn from the study: in one case the pt refused to continue the treatment and in one case we registered an early progression. 1-year survival probability was 68%; median time to progression was 6.1 months. Median survival has not been reached yet.

Conclusion: At this dose and schedule the combination of GEM and CDDP appears to be active considering that response rate and survival stand in the range of the most active regimens. Considering toxicity, the schedule appears safe even in this special subset of elderly patients. Complete data will be available for the congress.

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POSTER

Adjuvant radiotherapy of the cervical carcinoma in elderly patients

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Background: In older cancer patients, comorbidity can have an influence on survival and can enhance the risk of treatment complications. The purpose of the study was to analyze survival and late complications according to performed surgery and postoperative radiotherapy in elderly cervix cancer patients.

Material and Methods: We retrospectively reviewed the medical records of 44 cervix cancer patients older than 60 years, treated by postoperative radiotherapy between 1996–1997 year. Radiotherapy for all patients included doses of 36–45 Gy of 6–10 MV external photons to pelvis in 18–22 fractions and concomitant brachytherapy with ¹⁹²Ir HDR. Brachytherapy was delivered in 4–5 fractions and 6–7.5 Gy to a dose of 28–35 Gy. The mean age of all patients was 65.5 years (range 60–74). The majority of patients, 39/44, had Stage Ib and the remainder, 5/44, had Stage IIa or IIb. Twenty-nine patients (65.9%) were treated by radical hysterectomy with lymphadenectomy (group I) while 15 (34.1%) by simple hysterectomy (group II).

Results: After a median follow-up of 48 months (range 2–60 months) the actuarial overall survival for all patients was 70.43%. Late gastrointestinal (GI) complications were determined in 40.9% and on urinary (UR) tract in 25%. The doses of external beam irradiation were equalized in both groups, while increased brachytherapy dose of 7.5 Gy per fraction was more represented in group I. A larger percent of late GI complications was found in group I vs group II (44.8% vs 33.3%) and also on UR tract (31.03% vs 13.3%).

Conclusions: Postoperative radiotherapy in elderly patients is good tolerated and late complications rate is acceptable with higher complications rate in a case of increased brachytherapy dose and after a more radical surgical procedure.

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POSTER

Radiotherapy for nasopharyngeal carcinoma in elderly: a retrospective review of 22 patients

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Background: The incidence of nasopharyngeal carcinoma (NPC) varies extensively with age, ethnic and geographical origin. Radiotherapy (RT) is the standard treatment. The elderly population is increasing in recent years, and the need for cancer care and treatment for the elderly is growing. This retrospective study aimed to evaluate the disease characteristics and outcome of radiotherapy in the elderly with nasopharyngeal carcinoma.

Materials and Methods: Between 1998 and 2002, 22 patients aged 75 and older with pathologically confirmed nasopharyngeal carcinoma were treated with radiotherapy in Taipei Veterans General Hospital. The median age was 77 years (range: 75–87). All patients were male. Clinical stage (UICC 1997) was stage I in 1, II in 4, III in 8, and IV in 9 (IVC in 4), respectively. Eighteen patients (82%) had nodal metastasis. Fourteen patients (64%) had non-keratinizing squamous cell carcinoma. Kaplan-Meier curves were used for evaluation of prognostic factors and were compared using the log-rank test with SPSS 13.0 software. Statistical tests were considered significant at $p < .05$.

Results: The median follow-up time for all patients was 17.1 months (range, 2.4–60.5 months). Twenty (91%) patients received RT alone and two patients received concurrent chemoradiotherapy. Nineteen (86%) patients received curative RT (range: 68–74 Gy), among which 16 completed RT. Three patients received palliative RT (range: 36–54 Gy) and all completed RT. Seventeen (77%) patients received more than 60 Gy. Four

(5%) patients experienced grade 3–4 acute side effects and one treatment-related mortality. There are 2 patients with grade 3–4 late side effects (one with nasopharyngeal necrosis and one with radiation encephalopathy) and 6 patients with grade 2 Xerostomia. The 1- and 3-year overall survival rates were 59.1% and 36.4%, respectively. The 1- and 3-year disease free survival rates were 61.1% and 27.8%, respectively. Age ≥ 80 years ($p < .001$), M1 stage ($p < 0.001$), stage IV ($p = 0.019$), palliative intent RT ($p = 0.017$), and RT dose < 60 Gy ($p = 0.009$) had a poor impact on overall survival.

Conclusions: High dose RT can be achieved in the majority of elderly patients with nasopharyngeal carcinoma and is associated with a low complication rate. Very old age, distant metastasis, and RT dose were important prognostic factors.

Paediatric Oncology

SIOP Europe special session

(Tue, 25 Sep, 09.00–11.30)

1400

ORAL

Late mortality among five-year survivors of cancer in teenagers and young adults in England

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Background: We have previously shown that survival to five years after a diagnosis of cancer in teenagers and young adults (TYAs) has greatly improved during recent decades, but little is known about subsequent mortality. We have analysed mortality in the next five years among five-year survivors of cancer in TYAs diagnosed during 1979–1998 in England.

Materials and Methods: 19,223 cancer patients aged 13–24 years diagnosed in 1979–1998, who had survived at least five years in England, have been included in the analysis. Cancer diagnosis and vital status for each patient were obtained from national cancer registrations for England. Patients were grouped using a specialized TYA diagnostic classification. Cumulative excess mortality for all causes in the next five years after surviving five years from diagnosis was calculated by taking into account of the sex, age, deprivation index and calendar year specific national mortality rates. Cumulative excess mortality in patients diagnosed during 1990–1998 was compared with a corresponding cohort diagnosed in 1979–1989 using Poisson regression (Dickman et al, 2004), allowing for sex, age at diagnosis and socioeconomic deprivation.

Results: Overall, the excess risk of dying of all causes in the next five years after surviving five years from diagnosis during 1979–1989 and 1990–1998 fell from 6.4% to 4.8% ($p < 0.001$). The decrease in cumulative excess mortality was most pronounced in patients with leukemia (14.5% to 7.5%), lymphoma (6.5% to 3.4%), and germ cell tumours (1.8% to 0.7%) (in all groups, $p < 0.01$). There were non-significant reductions for bone tumours (9.4% to 7.9%), melanoma (5.8% to 4.6%), and carcinomas (4.1% to 3.3%). There were non-significant increases for central nervous system (11.6% to 14.9%) and soft tissue sarcomas (9.2% to 10.4%).

Conclusions: Overall, the improvements in five year survival have been accompanied by a reduction in the risk of death during the subsequent five years. However mortality is high compared with the general population. Causes of late mortality should be investigated.

1401

ORAL

The biological basis of ploidy as a genetic marker for the distinct clinical behaviour of neuroblastic tumours

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Background: Neuroblastic tumors (NBTs) are biologically very heterogeneous and may display radically different clinical behavior. Ploidy has been correlated with clinically relevant subgroups of NBTs. Favorable NBTs are characterized by near-triploid DNA content whereas unfavorable NBTs are