and 64.05±10.90% respectively, p<0.05, Kaplan-Mayer's method) and in D2-D3 group compared with D1 group (97.50±2.47% and 85.87±3.65% respectively, p<0.01). Survival rate didn't depend on hystologic type of tumor. 5-year survival of mucosal cancer (Tis, T1m) was 92.47±2.97% and of submucosal cancer (T1sm) - 81.80±5.95% (p>0,05).

Conclusion: Reasons to extensive D2-D3 lymph node dissection for EGC are 1) the higher survival rate of patients in D2-D3 group with the absence of increasing postoperative mortality and morbidity; 2) difficulty in assessment the accuracy of modern technologies in diagnosing and staging of EGC. D2 resection is radical for the most EGC patients, but we propose more aggressive method, combined D2 resection with lymph node dissection node _12 group.

1164 POSTER

Docetaxel and 5-FU continuous infusion (DF) versus epirubicin, cisplatin and 5-FU (ECF) for advanced gastric adenocarcinoma; a randomized phase II study

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Purpose: Docetaxel shows promising activity as single agent against gastric cancer. To develop a combination chemotherapy (DF) for an ambulant setting we initiated this study. We used a randomized trial design comparing DF with ECF, one of the best investigated regimens, serving as an internal control arm to avoid selection bias. Eligibility: Metastatic or locally advanced gastric adenocarcinoma; PS 0-2; no prior chemotherapy. Methods: Patients (pts) are randomized to receive either ECF (Epirubicin 50mg/sqm d1, Cisplatin 60mg/sqm d1, 5-FU 200mg/sqm d1-21, q3w) or DF (Docetaxel 75mg/sqm d1, 5-FU 200mg/sqm d1-21, q3w).

Results: 55 pts are randomized so far. The study is ongoing. Baseline data is available of 48 pts: M/F 36/12; age 32-75 yrs (median 62); ECOG PS 0:18pts, 1:29pts, 2:1pt. 46pts are evaluable for toxicity: ECF 24pts, DF 22pts. Toxicity [%of pts, worst grade] ECF: Grade 1/2: nausea 71%, emesis 58%, asthenia 58%, diarrhoea 25%, stomatitis 33%, hand-foot 17%, paraesthesia 33%, neutropenia 13%, renal 8%. Grade 3/4: nausea 4%, emesis 4%, stomatitis 4%, hand-foot-syndrome 4%, neutropenia 54%, neutropenic fever 8%, non neutropenic fever 4%, renal toxicity 4%. 1 toxic death occurred in the ECF arm due to renal failure as part of a hepatorenal syndrome. DF: Grade 1/2: nausea 59%, emesis 27%, asthenia 73%, diarrhoea 45%, stomatitis 55%, hand-foot 36%, paraesthesia 36%, neutropenia 32%, renal 5%. Grade 3/4: asthenia 5%, diarrhoea 5%, stomatitis 5%, hand-foot-syndrome 5%, neutropenia 50%, no neutropenic fever, skin tox. 5%, cardiac tox. 5%, thrombosis 5%. 40 pts are evaluable for response (ECF 20 pts, DF 20 pts): ECF: CR 1/20, PR 9/20, NC 4/20, PD 6/20; DF: CR 2/20, PR 7/20, NC 4/20, PD 7/20. Tumor control rate (CR+PR+NC) is 70% for ECF and 65% for DF.

Conclusion: These preliminary results show that DF is a feasible combination which can safely be given in a fully ambulant setting. DF seems to be at least as tolerable as ECF and shows promising efficacy. The study is ongoing.

1165 POSTER

Changes in circulating dendritic cells in metastatic or locally advanced pancreatic carcinoma patients during chemotherapy

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Purpose: Since dendritic cells (DC) are the most potent antigen-presenting cells required for the initiation and maintenance of an effective anti-tumor response, the present study was performed to explore the possible relationship between the efficacy of the chemotherapy and changes in circulating DC in metastatic or locally advanced pancreatic carcinoma patients (pts).

Methods: We studied 12 pts, 9 male and 3 female (age range 51-84); 5 of them underwent medical treatment with 5-FU continuous infusion for 6 weeks, Cisplatin weekly and Gemcitabine on days 1-8-28-35. Controls were programmed every two months. DC were generated by culturing peripheral blood adherent cells from pts and normal subjects in granulocyte-macrophage colony-stimulating factor (GM-CSF) and interleukin-4 (IL-4) for 7 days, and characterized by flow cytometric analysis, capacity to release IL-12, and ability to stimulate eterologous T-cell proliferation and IFN-gamma production.

Results: DC from pts exhibited high levels of CD14 and lower levels of CD1a and CD40 expression as compared with those from healthy volunteers (p=0.02). CD40L-induced IL-12 p40 production of DC was generally increased in pts compared with controls (p=0.02), while bioactive IL-12 p70 was decreased (p=0.04). The T-cell stimulatory activity of DC was lower in pts than in controls (p=0.01), as well as the IFN-gamma production by T cells (p=0.04). After 2-4 months from chemotherapy, a slight increase in CD1a positive DC were found, together with an increase in IL-12 p70 (p=0.04) and a decrease in IL-12 p40 (p=0.02) production in response to CD40-L. In 50% of treated pts, DC increased their ability to induce IFN-gamma by T cells. However, in general, no significant changes in T cell stimulatory activity was observed.

Conclusion: These preliminary results suggest that DC from metastatic or locally advanced pancreatic carcinoma pts are functionally defective and that chemotherapy seem to be effective in modulating their biological activity.

1166 POSTER

A phase II study of weekly docetaxel and concurrent radiation in patients (pts) with unresectable esophageal cancer

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Background: The prognosis of patients (pts) with unresectable esophageal cancer treated with radiotherapy alone is poor, with a 2-year survival of only 10%. In contrast, concurrent chemoradiotherapy with cisplatin and fluorouracil regimens is superior to irradiation alone, but this combination is associated with substantial toxicity (Herskovic, 1992). Docetaxel has demonstrated a high radiosensitizing potential in preclinical studies (Mason, 1997). Likewise, weekly docetaxel 20 mg/m2 with concomitant radiotherapy is feasible and active in esophageal cancer (Mauer, 1998). The present study was designed to determine the response and toxicity of weekly docetaxel plus concomitant radiotherapy in pts with unresectable esophageal cancer.

Patients and Methods: Since November 1998, 18 pts with locoregionally advanced esophageal cancer have been treated with weekly docetaxel (20 mg/m2 as 1 hour IV infusion) plus concomitant standard radiotherapy to a total dose of 66 Gy. Patient characteristics: 17 (94%) male; median age, 64 years (range 41-88); median Karnofsky index, 80% (range 70-100%); 14 (77%) squamous cell carcinoma. At diagnosis, pts were considered unresectable due to involvement of tracheobronchial tree in 6 pts (33%), age older than 75 years in 3 pts (16%), distant lymph node metastases in 2 pts (10%) and medically unfit for surgical therapy in 7 pts (39%).

Results: To date, 15 pts have completed therapy. Major responses were seen in 6 pts (40%) including 4 complete responses (27%) and 2 partial responses (13%). No patients progressed during the therapy. Median survival duration is 10 months, and the 1-year is 57%. Hospitalization for toxicity was required in 7 pts (46%), the majority for esophagitis, but significant myelosuppression was not observed. There was one death during the treatment.

Conclusions: This study confirms the feasibility of weekly docetaxel with concurrent radiotherapy in pts with unresectable esophageal cancer. The 1-year survival achieved in this group of patients is promising. Further patient accrual is planned to confirm these results.

1167 POSTER

Gemcitabine (GEM) and capecitabine (CAP) for advanced pancreatic cancer. A phase I/II trial

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Purpose: GEM is presently the standard agent for the treatment of advanced pancreatic cancer. Preclinical studies suggest positive interactions between GEM and CAP, an oral 5-fluorouracil prodrug. In this study we in-

vestigated the addition of CAP to GEM in patients with advanced pancreatic cancer.

Methods: Patients (pts) with histologically or cytologically confirmed, inoperable or metastatic pancreatic cancer were included in this open multicenter study. GEM was given at a fixed dose of 1 g/m^2 on days 1 + 8. CAP was given q12hrs for 14 days. The regimen was repeated every 3 weeks. Starting dose for CAP was 1 g/m^2/d (level 1), escalating to 1.3 g/m^2/d and 1.6 g/m^2/d (level 2 and 3 resp.). Maximum tolerated dose (MTD) was defined as the dose causing dose limiting toxicity (DLT) in ≥1/3 of a cohort of 6 pts. DLT was defined as neutro- or thrombocytopenia grade 4, mucositis ≥ grade 3, hand-foot-syndrome grade 3, all according to NCIC CTC. At the recommended dose level (one level below MTD) an additional 10 pts. were included.

Results: 35 pts were included. DLT occurred in 2/6 pts at level 3 consisting of myelotoxicity and stomatitis. Hand-foot-syndrome and alopecia were not observed and other toxicities were mild. Thus, in this regimen the recommended dose of CAP is 1.3 g/m^2/d.

Of 24 pts: with measurable disease, so far 1 complete and 6 partial remissions (RR 29%) and several highly significant drops in CA 19-9 have been observed.

Conclusions: GEM and CAP is a highly active and well tolerated drug combination in advanced panoreatic cancer. It is presently compared to GEM-monotherapy in a phase III trial.

Gynaecological cancer

1169 POSTER

Factors determining acute normal tissue reactions of postoperative radiotherapy in endometrial cancer

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Purpose Our aim was to evaluate the influence of patient- and treatment-related factors on the risk of acute reactions during postoperative radiotherapy (RT) in endometrial cancer (EC) patients (pts).

Methods This series included 247 EC pts treated between 1974 and 1991 with surgery followed by RT consisting of Cs or Ra brachytherapy (BRT) and external beam RT (XRT). Mean BRT dose rate at 0.5 cm was 0.75±0.49 Gy/h and mean BRT dose was 50.1±11.7 Gy at 0.5 cm. Mean XRT dose within the target volume was 44.5±3.4 Gy given with a mean daily fraction of mean 1.82±0.15 Gy. Normalised Total Doses (NTD including XRT and BRT doses, were calculated based on linear-quadratic equation. EORTC/RTOG scale was used to score acute reactions.

Results Acute rectal reactions (of any grade) occurred in 188 pts (76%) and acute urinary bladder reactions - in 101 pts (41%). Severe (grade 3 and 4) acute rectal and bladder reactions were observed in 14 pts and 1 pt (5%), respectively. In univariate analysis, XRT dose (p=0.018) and total NTD in the prescription point (p=0.047) and in the rectum (p=0.037) were significantly correlated with the risk of acute rectal reactions, whereas age was of borderline significance (p=0.07). Multivariate analysis showed that NTD (p=0.007) and XRT dose (p=0.003) were independent risk factors for acute rectal injury. BRT dose (p=0.049), BRT dose rate (p=0.002), XRT fraction dose (p<0.001) and use of Cs (p<0.001) were in univariate analysis correlated with the risk of acute bladder injury, whereas parity (p=0.074) and NTD (p=0.063) were of borderline significance. In multivariate analysis none of these factors was significantly correlated with the risk of acute bladder injury. Interestingly, no clinical factor (age, parity, FIGO stage, diabetes, hypertension), neither RT time and surgery-RT interval was independently associated with acute rectal and/or bladder injury.

Conclusions The risk of acute normal tissue reactions depends mainly on treatment-related factors (NTD, XRT dose), whereas the impact of patient-related variables is negligible. Precise treatment prescription, planning and verification are of paramount importance.

1170 POSTER

Adequacy of small pelvic irradiation instead of whole pelvic irradiation for a subgroup of lymph-node negative patients In postoperative radiotherapy for cervical carcinoma

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Purpose: In postoperative radiotherapy (postop RT) for cervical carcinoma, a whole pelvic irradiation (WP) which includes pericervical regions and the lymphatic system up to common iliac lymph node (LN) regions has been used irrespective of nodal status. We clinically verified logical adequacy of using a small pelvic irradiation (SP) for LN negative patients; SP includes pericervical regions only and in consequence covers external and internal iliac LN regions. Methods: 85 patients with stage I or II cervical squamous cell carcinoma treated by postop RT between 1990 and 1998 were eligible. The patients had any of risk factors of deep stromal invasion, lymph-vascular infiltration, close surgical margin, and LN metastasis. RT doses ranged from 48.0 to 54.0 Gy, with or without another boost doses. WP was used for a group of 42 LN positive patients and SP for another group of 43 LN negative patients. Survival rate (SR), disease free rate (DFR), and pelvic disease free rate (PFR) were calculated by the Kaplan- Meier method to make a comparison between two groups. Results: 4 patients showed recurrence and 3 died of disease in SP group, whereas 15 showed recurrence and 12 died of disease in WP group; 3 and 4 showed pelvic recurrence in respective groups. SR and DFR were significantly higher for SP group than for WP group: 2-year SR being 93% vs 83% (p=0.0124) and 2-year DFR being 91% vs 69% (p=0.0029), respectively. In contrast, PFR did not differ between SP group and WP group: 2-year PFR being 93% vs 88% (p=0.2532), respectively. Conclusion: Use of SP is sufficient for LN negative patients in whom pericervical regions are the main sites of recurrence.

1171 POSTER

Does palliative chemotherapy provide a palliative effect in cervical carcinoma? A review of the literature

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Purpose: To review whether palliative chemotherapy has an evidence-based palliative effect (on pain, discharge, bleeding, fatigue etc), besides the limited effect on survival.

Method: 69 palliative chemotherapy studies were identified in Medline during 1987-2000. Data on type of treatment, response rate, response duration, side-effects, and effect on symptoms and quality of life were registered.

Results: Response rates were often in the range of 10-40%, with a short duration. Only in 12/69 studies there were any approach to evaluate a possible palliative effect on pain, subjective improvement of other cancer related symptoms (bleeding, discharge, oedema, breathlessness etc.) or improvement of performance status using a defined instrument. The scarce data indicate that palliative chemotherapy might have a good effect on symptoms, but the strict evidence-base is poor.

Discussion: Pain, discharge, haemorrhage, fatigue and dyspnoea are frequent problems in recurrent cervical cancer. Convincing data show that objective tumour response and duration of response is limited. Still, patients might benefit from palliative chemotherapy as regards improvements in symptom control and quality of life. Studies that are designed to evaluate such true palliative effects are needed.

1172 POSTER

Therapeutic outcome in the radiotherapy of relapses of cervical carcinoma

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Objective: The purpose of this study was to evaluate the efficacy of radiotherapy in patients with relapses of cervical carcinoma.

Methods: A retrospective analysis was undertaken of 27 consecutive patients who underwent radiation therapy for relapses of cervical carcinoma between 1989 and 1999. The median follow up was 14 months (1-61). 17 patients had inoperable tumors or macroscopic residual tumor following surgery of the recurrence. 4 patients had a microscopically incomplete surgery, 6 patients had a complete tumor resection. Radiation