lobe 22.3%, and 44.4% multiple tumorous nodules in both lobes. 44.4% had incidental operative HCC. The larger nodules had a median diameter of 4.5 cm. Median Child and Pugh classification was B-7. Median αfetoprotein level was 16. Median prothrombin time was 70%. Median patient age was 57 years. Male/female ratio 3:1. Median ECOG was 1. Two patients received preoperative treatment: 1 underwent PIE and tamoxifen, and 1 chemoembolization. Mean time from transplantation to chemotherapy was 25 days. Ventricular heart function was not monitored because no patient received doxorubicin dosage in excess of 200 mg/m^2 and there was no previous cardiopathy in the enrolled patients.

Results: 66% patients received full dosage and completed the scheduled treatment. 22% had 25–50% dose reductions for myelotoxicity (grade III–IV). 1 patient (11.1%) had treatment withdrawn due to toxicity after 12 doses (P. Carinii and CMV pneumonia). There was 1 treatment related death (P. Carinii pneumonia at 4 months). Reduced immunosuppression doses were administered to 4 patients during chemotherapy due to high serum levels. 4 patients relapsed (44.4%), 1 in the first year, 3 in the third year. 2 patients died without evidence of tumor (1 of pneumonia and 1 of acute Epstein-Barr hepatitis), and 3 patients are still living without evidence of disease at 4, 13 and 14 months. C virus recurrence occurred in 1 patient. Median survival following transplantation was 14 months (4 to 37 months).

Summary: Liver transplantation combined with doxorubicin adjuvant chemotherapy is a feasible treatment in hepatocarcinoma-cirrhotic patients and seems to have a moderate effect in survival in this group of patients.

518 POSTER

Localised squamous – cell cancer of the oesophagus: Retrospective analyzis of three results

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Background: Oesophagectomy is the standard curative therapy for patients with clinically localized disease. The question remains concerning immediate surgical intervention or surgery after preoperative chemoradiotherapy. Many teams opt for exclusive chemoradiotherapy. The aim of this study is to analyze these three treatment alternatives.

Patients and Methods: 128 patients with localized squamous-cell oesophageal cancer (38 stage I, 71 stage IIA and 19 stage IIB according to the UICC 78 TNM classification) were treated between 1989 and 1995. They were divided into three groups: O group (treatment by oesophagectomy) n = 30, RCT + O group (treatment by preoperative chemoradiotherapy and oesophagectomy) n = 39, RCT group (treatment by exclusive chemoradiotherapy). n = 59. Factors concerning age, tumour localization and stage were similar in all groups.

Results: The O group showed no postoperative mortality, in the RCT + O group surgery mortality was 12.8%. The mortality after RCT was 1.7%. After preoperative chemoradiotherapy, oesophageal sterilization was observed in 25% of cases and the curative exeresis rate was higher (82% after RCT + O versus 60% after O). The survival difference at 5 years between the 3 groups was not significant (O group 11.6%, RCT group 21.5%, RCT + O group 42.7%). The median survival was respectively 23, 28 and 34 months. The disease free survival was identical for the O group and the RCT group. Oesophagectomy significantly improved disease free survival in patients treated by chemoradiotherapy (RCT + O versus RCT, p = 0.041). Palliative care (dilatations, prosthesis, gastrostomy or jejunostomy) to improve dysphagia was necessary in 36% of patients treated by exclusive chemoradiotherapy versus 11% of patients treated by surgery (p = 0.001).

Conclusion: Treatment by oesophagectomy or exclusive chemoradiotherapy was not significantly different. Preoperative chemoradiotherapy and surgery offered a higher survival rate than exclusive chemoradiotherapy, however, a high postoperative mortality rate was observed. This study suggests the relevance of a prospective randomized trial to compare RCT + O and RCT alone.

519 POSTER

Radio-chemotherapy and high dose rate (HDR) brachytherapy in the treatment of esophageal cancer

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Purpose: In spite of some improved results with radio-chemotherapy in locally advanced esophageal cancer local control is unsatisfactory. Because of that we increased the radiotherapy dose to the tumor with it combination of external beam radio-chemotherapy followed by HDR brachytherapy.

Methods: Our protocol consists of external radiotherapy to the esopahgus (single dose 2 Gy, total dose 56–60 Gy) and chemotherapy (5-FU 1000 mg/m^2/d, cisplatin 25 mg/m^2/d) during week 1 and 5. The percutanous radiation follow 2 HDR-brachytherapy applications, 5 Gy each/0.75 cm distance from the applicator surface.

Between Jan 92–June 98 42 pat. have been treated, median age 59 y (41–76). 34 pat received the whole treatment course; 12 pat. did not receive brachytherapy because of acute oesophagitis (5) or refusal of esophagoscopy (7). Median tumor length was 7 cm (3–12), 38/42 pat. corresponded to tumor class cT3 or cT4.

Results: 34/42 pat had endoscopically complete response. 9 pat. (8/12 pat. without and 1/30 pat with brachytherapy) developed a local recurrence after 5–20 months. Median survival was 21 months, 1- and 3- year survival rates were 74% (48%–88%) and 41% (22%–69%).

Conclusion: The combination of external beam radiochemotherapy and HDR-brachytherapy seems to improve the results concerning local control.

520 POSTER

The royal marsden experience with chemo-radiation using protracted infusional (PVI) 5-fu and cisplatin with conformal radiotherapy (CR-RT) in locally advanced oesophageal cancer

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Purpose: To establish the toxicity and efficacy, in terms of response rate and survival, to PVI 5FU, Cisplatin and Conformal RT in patients with locally advanced oesophageal cancer.

Methods: 58 patients with inoperable disease were registered for treatment with induction chemotherapy consisting of 12 weeks of PVI 5FU (300 mgs/m^2) and three weekly Cisplatin (60 mgs/m^2). RT (54 Gy) was scheduled to commence at week 12, coinciding with the final Cisplatin, and was given concomitantly with PVI 5FU (200 mgs/m^2). Response was measured symptomatically, endoscopically and by CT. Toxicity was scored by CTC, RTOG and LENT SOMA scales.

Results: Out of the 47 patients registered, 43 commenced CF chemotherapy (4 patients ineligible) and 28 (67%), went on to receive radiotherapy. Reasons for not receiving RT were; progression/death (7), Surgery (7), patient refusal (1). With induction chemotherapy, dysphagia improved in 74% of patients, CT response (CR + PR) was 51% and Gd3 + Gd4 toxicity was 17% and 7%, respectively. Overall objective response for patients completing RT was 59%. Gd 3 & 4 Oesophagitis during chemo-radiation was 24% and 8% respectively. Median survival (all patients) is 14.1 months, and 15.2 months for those completing CF RT. 1 year and 2 year survival (all patients) was 58% and 38%, respectively, and for those completing CFRT was 67% and 43%, respectively.

Conclusion: This is a well tolerated schedule producing impressive response rates, median survival and two years survival figures in a poor prognosis group of patients.

521 POSTER

First line treatment with docetaxel (D) and gemcitabine (G) in patients with inoperable pancreatic cancer: A multicenter phase II study

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Objectives: Treatment of pancreatic cancer remains disappointing. D and G have shown limited objective activity in patients with advanced pancreatic cancer but they seem to confer an improvement of disease-related symptoms. The tolerance and efficacy of their combination as 1st line treatment

was evaluated in a multicenter phase II study. Patients and treatment: 56 chemotherapy-naive patients with locally advanced or metastatic disease were enrolled. The median age was 60 years; men were 34 and women 22; PS was 0 (n = 15 pts), 1 (n = 21 pts) and 2 (n = 20 pts). G (1000 mg/m^2) was administered on day 1 and 8 and D (100 mg/m^2) on day 8, every 3 weeks; G-CSF (150 igr/m^2, sc) was given (day 9–15).

Results: All patients were evaluable for toxicity and 43 of them for response. Five (11.6%) pts achieved PR while 17 pts (39.5%) had SD and 21 pts (48.8%) PD. The median duration of response and the median TTP were 3 and 9 months respectively while the median survival was 8 months and the probability for one year survival 32%. Grade 3/4 neutropenia occurred in 15 pts (23%) and in 6 (11%) of them it was complicated with fever; 1 septic death occurred. Grade 3 anemia and grade 3/4 thrombocytopenia occurred in 6 (10.7%) and 4 (8%) pts respectively. Non hematologic toxicity: grade 3/4 diarrhea in 2 pts (4%), grade 2 neurotoxicity in 3 pts (5.4%) and grade 3/4 fatigue in 7 pts (13%); moderate hypersensitivity reactions in 4 pts (7.1%) and moderate fluid-retention syndrome in 14 pts (25%). A total of 201 cycles were administered (median number/patient: 3). The median administered dose was 90% and 94% of the planned doses for D and G, respectively.

Conclusions: Although, the D + G combination is well tolerated and seems to have a marginal activity in patients with advanced pancreatic cancer, conferring to them some clinical benefit, it does not seem to be superior to single-agent therapy with either G or D.

522 POSTER

Direct endoscopic injection of cisplatin/adrenaline gel for palliation of dysphagia in patients with advanced esophageal cancer

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Purpose: We evaluated the safety and efficacy of direct endoscopic injection of cisplatin/adrenaline [epinephrine] injectable gel (CDDP/epi gel) for sustained local chemotherapy in the palliation of dysphagia in advanced esophageal cancer.

Methods: Open-label, Phase III studies enrolled patients with advanced esophageal cancer. CDDP/epi gel was injected intratumorally weekly for up to 6 wk or until all exophytic tumor was ablated.

Results: 23 patients enrolled; 17 evaluable. Median dysphagia grade: 3 (scale, 1–5; range 2–5). Median no. of treatments: 3 (1–6). Evaluations follow:

Evaluation	Dysphagia[a]	Duration, days (median [range])	Lumen Patency	Duration, days (median [range])
Improved[b]	3 patients	55 (43–56)	5 patients	46 (36–56)
Unchanged	9 patients	39 (28–111)	11 patients	29 (28–111)
Worsened	3 patients	–	1 patient	–

[a]Not available in 2 patients; [b]>1 point improvement.

Median survival for all 17 patients from first treatment was 146 d (44–301 d). The 5 patients with sustained tumor-volume reductions had a median survival of 242 d (158–301 d). No medically significant toxicities typically associated with systemic administration of cisplatin were reported.

Conclusion: Intratumoral CDDP/epi injectable gel is a simple method for relieving dysphagia due to predominantly exophytic esophageal cancer. This local chemotherapy may be complementary to stent insertion.

523 POSTER

Radiochemotherapy in anal canal carcinoma (ACC). A randomized clinical trial comparing FluoroUracil-Cisplatinum (5FU-CDDP) and CDDP alone

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Purpose: 5 FU-CDDP and 5FU-Mitomycin are the most commonly used chemotherapy regimens for ACC in combination wih radiotherapy (RT). CDDP is also an attractive drug due to its high rate of clinical response in squamous cell carnicoma. This randomized trial aimed at comparing 5FU-CDDP versus CDPP given concomitantly with RT in ACC.

Methods: Between 1992 and 1995, 26 patients (pts) were included in this randomized trial. Inclusion criteria were: squamous cell carcinoma of ACC, without distant metastases, patients who could receive RT and chemotherapy for curative intent. Radiotherapy was given with external beam RT (direct perineal field: 30 Gy/10 F/12 days and sacral fields 18 Gy/6 F/3 weeks) followed by Iridium implant (15–25 Gy/1–2 days). One course of chemotherapy was given during EBRT: 5FU J1J4: 800 mg/m^2 continuous infusion CDDP: 80 mg/m^2 J2 (5FU-CDDP) or CDDP J1–J3: 30 mg/m^2 continuous infusion (CDDP alone).

Results: the two groups were identical sex ratios (11 female vs 2 male) median age (65 vs 66 years). T1-2 (9 vs 10) T3-4 (4 vs 3). NO (7 vs 6). N1-2-3 (6 vs 7). Median followup was 52 months. Two months alter the end of treatment a complete remission was seen in 11 pts in 5FU-CDDP group (I) vs 12 pts in CDDP group (II). There was no local recurrence in group I and one in group II. At 4 years the overall survival was 91% in both groups. There was 2 grade 3 complications in group I and none in group II.

Conclusion: This small randomized trial shows no significant difference in local survical and toxicity between 5FU-CDDP and CDDP alone conbined with RT in ACC. CDDP alone which has an excellent tolerance could be tested on a large scale for T1-2 NO tumors of the ACC.

524 POSTER

Complete peritonectomy associated with intra peritoneal hyperthermic perfusion in the treatment of Pseudomyxoma Peritonei: Experience at the National Cancer Institute of Milan

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Introduction: Pseudomyxoma Peritonei is a rare disease characterized by a complete redistribution of mucin into the peritoneal cavity. Pseudomyxoma Peritonei could be classified into three diagnostic categories: disseminated peritoneal adenomucinosis (DPAM), peritoneal mucinous carcinomatosis (PMCA) and Intermediate Group (IG). DPAM is characterized by little cytologic atypia or mitotic activity often associated with an appendiceal mucinous adenoma, while PMCA shows cytologic features of adenocarcinoma. The intermediate group shows features between DPAM and PMCA and derived from well-differentiated appendiceal or intestinal mucinous adenocarcinoma.

Procedures: The natural history of PMP was strongly modified by the introduction of a new methodology proposed by Sugarbaker: the cytoreductive surgery that may require six peritonectomy procedures associated with Intra Peritoneal Hyperthermic Perfusion (IPHP) that combines hyperthermia and high drugs doses. Since November 1996, 12 patients with PMP syndrome have undergone surgical procedure in order to be treated by Sugarbaker's technique. Six cases were classified as DPAM, 4 as PMCA and finally 2 as intermediate histology. In the DPAM group three patients underwent appendicectomy before.

Results: All DPAM patients have been treated by Complete Peritonectomy and IPHP. Into the intermediate histology group 1 patient received Complete Peritonectomy and IPHP while 1 patient previously treated elsewhere 3 times by surgery received only induction IPHP. Unfortunately no patients in the PMCA group were eligible for the proposed treatment and received only an explorative laparotomy and partial debulking. IPHP was conducted by the closed abdomen technique using CDDP and MMC. All patients showed high CEA marker values that drastically decreased in those treated by Complete Peritonectomy and IPHP. All treated patients are NED.

Conclusion: Patients with PMP originated from undifferentiated mucinous adenocarcinoma were not eligible for this technique. Complete Peritonectomy associated with IPHP is the most indicated approach to cure this rare disease. This study was partially supported by the Associazione Italiana per la Ricerca sul Cancro.

525 POSTER

Concurrent high dose radiotherapy and cisplatinum-based chemotherapy ± immunotherapy versus radiotherapy alone in esophageal carcinoma. Molecular biology in assesment of response to chemoradiotherapy

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Purpose: In current study, we compared concurrent chemoradiotherapy (CRT) ± Immunotherapy to radiotherapy alone (RT) in patients with esophageal Ca. Molecular biology including DNA ploidy status, SPF and