for both scales. Interobserver variability was less using the ECOG scale. We conclude either scale could be used with good interobserver reliability. The ECOG scale minimises differences between observers.

1477 PUBLICATION

Survical prediction in terminal cancer patients: Proposal of a model based on analytical variables

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Objectives: The prognosis of terminal cancer patients is usually determined by symptoms and scores in quality of life scales. Analytical data have not been commonly studied. We tried to identify analytical prognostic variables for survival in terminal patients with cancer.

Patients and Method: 316 patients and 22 analytical parameters were studied with regard to survival (blood count, renal and hepatic biochemistry, albumin and total proteins, cholesterol, ions, etc). The actuarial method was used to assess survival and survival comparisons were made with the log-rank test and the Breslow test. Step-wise regression analysis was then performed with the Cox method.

Results: The median survival was 26 days (295 patients have died and 21 remain alive). The univariate analysis found a relation between a short survival and the following parameters: hypoalbuminemia ($p < 0.001$), hypocholesterolemia ($p < 0.05$), lymphopenia ($p < 0.001$), anemia ($p < 0.001$), and increased values of LDH ($p < 0.01$), alkaline phosphatase ($p < 0.01$) and gamma-GT ($p < 0.05$). The regression analysis confirmed the values of albumin, cholesterol, LDH and alkaline phosphatase as independent prognostic factor for survival in these patients.

The combination of albumin and LDH defined 3 groups of patients with different survival: 1) albumin > 3g/dl and LDH < 400U/L, median survival 41 days; 2) albumin < 3g/dl or LDH > 400U/L, 27 days; and 3) albumin < 3 g/dl and LDH > 400 U/L, 15 days ($p < 0.000$).

Conclusion: The values of albumin and LDH may help define the prognosis in terminal patients with cancer.

1478 PUBLICATION

Fatigue and quality of life (QoL) in cancer patients – Relations between haematological parameters and subjective assessment

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Purpose: Objective was to investigate relations between blood data and subjective experience of fatigue and QoL in cancer patients presently undergoing chemotherapy.

Methods: The present survey includes 58 cancer patients (21 colorectal, 23 bronchial, 14 ovarian cancer) with an average age of 59.2 ± 10.6 years. According to their diagnosis all patients received individual chemotherapy. Fatigue was measured with the Multidimensional Fatigue Inventory (MFI), QoL with the EORTC QLQ-C30. These assessments were carried out immediately before each chemotherapy cycle. At the same time blood data (hemoglobin (Hb), leucocytes, thrombocytes etc.) were collected.

Results: Except for the first chemotherapy cycle, correlations between Hb and subscales of MFI were moderately high (Hb with general fatigue: $r = -0.44$ at cycle 2, $r = -0.44$ at cycle 3). Significant correlations were also found between Hb and certain EORTC QLQ-C30 subscales (Hb with global Qol: $r = -0.50$ at cycle 2, $r = -0.42$ at cycle 3).

Conclusion: In spite of the significant correlations found, results indicate that Hb-values yielded rather incomplete information about subjectively experienced fatigue and QoL in cancer patients.

1479 PUBLICATION

Reirradiation with concomitant application of ethyol (amifostine) in recurrent pelvic tumors – First results from a phase II study

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Purpose: Unresectable recurrent carcinomas in preirradiated pelvic areas are a major problem for the radiooncologist because of exceeding the tolerance doses of bowl and bladder. Ethyol (Amifostine) has been shown to have a radioprotective effect on normal tissues. The aim of this prospective study is to evaluate whether the concomitant application of Ethyol (Amifostine) is able to reduce radiation associated side effects of pelvic high dose reirradiation.

Methods: Patients with a history of prior irradiation in the pelvic region at least 6 months before recurrence are included in the study. The study design consists of a pelvic reirradiation of the gross disease with a 2 cm margin to a dose of 39.6 Gy (1.8 Gy single dose). Additionally 500 mg Ethyol (Amifostine) are infused 20 minutes prior to irradiation. Toxicity and life quality are documented.

Results: 7 patients has been included in the study. All patients had a histologically confirmed pelvic recurrence of a gynecologic or rectal carcinoma. Of these patients 5 have completed therapy so far. No interruption of therapy was necessary. The acute radiation associated side effects were mild to moderate. No grade III/IV toxicities (EORTC/RTOG) were observed. Some episodes of nausea and hypotension due to amifostine were noted. All patients achieved a good palliative effect.

Conclusion: Our preliminary results indicate that high dose reirradiation of pelvic recurrences is feasible with a low rate of side effects and a good palliative effect.

1480 PUBLICATION

Interest of bipulmonary irradiation combined with concomittant chemotherapy in treatment of pulmonary metastases

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Aim of the study was to evaluate the palliative effect of bipulmonary irradiation combined with CDDP (100 mg/m^2 Day 1) on dyspnea and performance status in patient with symptomatic bilateral pulmonary metastases.

Patients and Methods: From 05/92 to 03/98, 19 patients (sex ratio 3) with symptomatic and rapidly growing pulmonary metastases disease (Kidney: 7 cases, parotid gland: 4 cases, sarcoma: 3 cases, adenocarcinoma: 4 cases, hepatocarcinoma: 1 case) were treated in palliative intent with bipulmanory irradiation (6 Gy/2 fractions/2 days) and concomittant CDDP.

The same schedule was repeated every 4 weeks in case of clinical response up to a maximum of three cycles.

Results: The response was evalated on the WHO performance status stade, WHO dyspnea score, and metastases measurement.

13 patients (70%) have had a significant improvment of dyspnea after 2 cycles. The performance status was improved in half of patients. No toxic death occurred.

Conclusion: Finally this regimen seems to be well tolerated, cost effectiveness and provide signifiant improvment of quality of life in advanced patients.

1481 PUBLICATION

Analysis of the effect of chemotherapy (CT) on erythropoietin (EPO) synthesis in cancer patients (PTS)

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From June 95 to May 97 serum EPO levels were measured during CT treatment in 32 cancer pts. CT schedules used were: CDDP + VP-16 for small cell lung cancer (SCLC, n = 6), BEP for germ cell tumours (GCT, n = 6), CMF for breast cancer (BC, n = 10), 5-FU + LV for colorectal cancer (CRC, n = 10). Three serum EPO measurements were made (EPO-ELISA) coinciding with the 1st, 3rd, and final cycle given. The pts receiving CDDP (SCLC + G-CT) required transfusions due to G3–4 (WHO) anaemia and