cused almost exclusively on symptoms that had a dose-limiting effect of chemotherapy.

Conclusion: There is significant variability in the pattern of identifying chemotherapy-related symptoms among oncologists, and when symptoms are identified efficacious actions to manage them are not routinely taken. The routine use of clinical information systems with direct patient input regarding symptom presence and severity should help to ensure symptoms are identified in a timely manner and intervened with appropriately, especially if oncologists receive tailored feedback on the symptom status of their patients and the efficacy of the actions they took to manage the symptoms.

1336 POSTER

Neuroprotective effect of vitamin e supplementation in patients treated with cisplatin-based chemotherapy

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Aim: Clinical and neuropathological features observed in cis-platin(DDP)-induced neuropathy are similar to those observed in Vitamin E deficiency neuropathy. The aim of the present study is to evaluate the neuroprotective effect of the antioxidant Vit E supplementation in patients treated with DDP - based chemotherapy (CT).

Patients and Methods: Forty-six untreated patients(pts)were enrolled in the study (age ranged from 20 to 65 yrs). Patients candidate to DDP treatment,given alone or in association with other non neurotoxic drugs, were assigned after informed consent to (group A) oral administration of 300 mg/day of Vit E during DDP treatment,or to(group B) DDP-based CT alone. Neurotoxicity was evaluated by an elettrophysiological examination of sensory median and sural nerves and was performed at basal condition, after 3 and after 6 courses of CT. The neurotoxicity was graded following the Chaudry score. A measurement of Vit E plasma levels was also performed for all patients before treatment and at the end of CT. Statistical analysis was carried out with the paired t-Student test.

Results: Twenty-one pts were excluded due to disease progression(18pts),or discontinuation of Vit E (2pts). Twenty-five completed 6 corses of CT (group A=11, group B=14) and were evaluable for the study. The mean total dose of DDP administered for each pt was 480 mg/m2. No significant difference in response rate was observed in both groups. Median Vit E plasma value measured before treatment was similar in the two groups. Mean neurotoxicity score in pts of group A(Vit E)was 1.6. Only 4/11 pts complained mild signs of peripheral neurotoxicity (36%). Patients of the group B (control) showed clinical signs of neurotoxicity in 11/14 cases, with a mean toxicity score of 4.6 ($p<0.00$). Only 2 pts did not complain signs of peripheral toxicity, while in 12/14 cases(85%,$p<0.00$) neurotoxicity resulted moderate to severe. Vit E plasma levels assessment after 6 couses of CT is still ongoing and will be shown.

Conclusion: Patients undergoing daily assumption of 300 mg of Vit E from the beginning of DDP-based CT to discontinuation of treatment do not complain toxicity,or suffer of mild signs of peripheral neurotoxicity when compared to a control group. These data seem to indicate a neuroprotective effect of Vit E in patients with potential development of neurosensitive damage and encourage to a more extended experiences. Supported by Fondazione per la Ricerca Oncologica (F.O.R.O. ONLUS)

1337 POSTER

The role of serum cystatin c and TC-99M MAG-3 renal scintigraphy for predicting cisplatin induced nephrotoxicity in cancer patients

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Cisplatin, a nonclassic alkylating agent, is one of the most effective agents available for treating solid tumors. However, its clinical utility is compromised by the onset of severe dose-limiting toxicities, especially nephrotoxicity. In recent years several reports have confirmed that cystatin C demonstrates a better correlation with glomerular filtration rate than serum creatinine. In this study we compared serum cystatin C level with serum creatinine and renal scintigraphy. Serum cys-C, serum creatinine concentrations and 99mTc-MAG-3 scintigraphy were studied in 22 cisplatin-naive cancer patients before and 24 hours after cisplatin-based chemotherapy. Serum cystatin C (0.86±0.34 mg/dl vs 0.96±0.45 mg/dl) and creatinine levels (0.78±0.14 mg/L vs 0.82±0.20 mg/L) increased in cancer patients after chemotherapy, but these differences were not statistically significant ($p>0.05$). Semiquantitative variables of 99mTc-MAG-3 scintigraphy (T **, R 20/max*, Tmax**) significantly elevated after chemotherapy. (T *-min: 10.27±5.00 vs 16.17±9.40, R 20/max: 0.40±0.12 vs 0.67±0.45, Tmax-min: 5.40±4.01 vs 7.59±5.30: *$p<0.001$, **$p<0.01$). Significant correlation was found between pre- and post-therapy values of cystatin C and creatinine ($r=0.61$, $p<0.001$). There was no significant correlation between pre- and post-therapy values of T*, R 20/max and creatinine ($r=0.06$, $r=0.13$, $p>0.05$; respectively). Significant correlation was found between pre- and post-therapy values of T * and cys-C ($r=0.29$, $p<0.05$). No significant correlation was found between pre- and post-therapy values of R20/max and cys-C ($r=0.03$, $p>0.05$). These data suggest that MAG-3 scintigraphy is highly sensitive method to cisplatin-induced nephrotoxicity. The efficacy of cystatin C for early detection of cisplatin-induced nephrotoxicity may be superior compared with creatinine. However, additional long-term, wide scope studies are needed to determine a standard procedure for clinical usefulness of cystatin C.

1338 POSTER

99mTc-MIBI myocardial perfusion scintigraphy in the assessment of early cardiac effects of anthracycline cancer therapy

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Detection of early adverse cardiac effects after anthracycline cancer treatment may enable recognition of patients of risk of late cardiotoxicity at retreatment.

We investigated 26 patients/pts (age 32-69, median age 46,6) with breast cancer, before treatment and after 2 courses haemotherapy: Gr.I(n6) with CMF (cyclophosphamide,methotrexate,5 fluorouracil) and Gr.II (n20) with FEC therapy (5 fluorouracil, epirubicine, cyclophosphamide).

Investigation of myocardial perfusion with 99mTc-MIBI and evaluation of systolic function and LVEF (left ventricular ejection fraction) echocardiographicaly were performed. Myocardial perfusion scintigraphy was fulfilled on SPECT gamma camera Siemens,Diacam at rest condition after application of 370 MBq 99mTc-MIBI. Segmental tracer activity was analyzed quantitavely (Siemens Quantitative Heart Application)

Before treatment a total number of patients have normal myocardial perfusion and systolic function.After treat-ment we established 2 groups of patients: Gr.I (CMF)is a control group. A total number of patients (n6) had normal myocardial perfusion after treatment. Gr. II (n20)- FEC therapy: Gr.IIa-12 pts. had normal myocardial perfusion, normal systolic function of LV; Gr.IIb-2 pts. were with myocardial hypoperfusion, decreased LVEF; Gr.IIc- 5 pts.- with myocardial hypoperfusion, normal LVEF; GrIId- 1 pt with normal myocardial perfusion, decreased LVEF. Hypoperfused segments in pts GrIIb were severely hypoperfused- range 37%-43%, mean 40% as well as EF- range 40%-52%, mean 46% also showed decrease. Hypoperfused segments in pts Gr.IIc established mild to moderate hy-poperfusion range 58%-70%, mean 61%. The comparison between the two groups indicated the highest incidence of early cardiac adverse effects after anthracycline therapy.

It is concluded that evaluation of early cardiac effects from anthracycline cancer therapy with 99mTc-MIBI ap-pears to be feasible. In these pts an early identification of myocardial hypoperfusion after low doses anthracyclines may diminish the cardiac risk for cancer retreatment by means of follow up the cardiac status.

1339 POSTER

The effect of prednisolone following whole brain irrdiation on blood-brain barrier of the mouse – In the view of acute change

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Purpose: The radiation induced blood-brain barrier (BBB) breakdown is of interest in the view of pathophysiological mechanism leading to development of acute brain edema. Gluticorticoids are widely used concurrently with radiotherapy for their putative salutary effect on brain edema. But the action mechanism of gluticorticoid on the afflicted brain remains for the most part an enigma. This study was tried to determine the peak time of radiation damage on BBB of mice. We also observed whether prednisolone can