the entire medical profession and clearer guidelines about which end-of-life care practices are legally and ethically acceptable.

933 POSTER

Incidence and burden of chemotherapy-induced nausea and vomiting in the context of current Canadian practice

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Background: Chemotherapy-induced nausea and vomiting (CINV) is a major side effect of cancer treatment. Despite the development of the serotonin-antagonists, CINV continues to be a substantial problem for patients receiving emetogenic chemotherapy treatment, especially with regimens defined as highly emetogenic (CTx).

Objective: To estimate the incidence of CINV in the context of current practice in Ontario and Qu ebec and to measure its impact on patients' daily activities.

Methods: Patients scheduled to receive a highly emetogenic chemotherapy regimen (level 5 on the Hesketh's scale) were recruited from three oncology centers in Canada. They were provided with a 5-day dairy to determine the extent of CINV following CTx. To reflect current practice, no specific antiemetic regimen (prophylactic or rescue) was imposed in this study. Patients received the antiemetic treatment as usually prescribed by their physician.

Results: Of the 142 patients recruited so far, 129 (91%) completed and returned their dairy. On day 1 (acute emesis), 23% of patients reported nausea (N) or vomiting (V). From day 2 to day 5 after chemotherapy (delayed emesis), 41% reported N or V. For the overall 5-day period 33% of patients reported V at least on one day while N was reported at least on one day by 35% of the patients. No significant differences were found according to age, gender or treatment center. Those who experienced N or V were on average unable to carry out their daily activities for an average duration of 17.5 hours (SD = 25), because of N or V. Also, friends or relatives of these patients had to spend an average of 8.5 hours (SD = 20) helping these patients because of N or V.

Conclusion: Despite modern antiemetic treatments, CINV is still a significant problem in the acute and especially, in the delayed phase, in the context of current practice in Canada.

934 POSTER

Improvements in pain and functional interference following palliative radiotherapy for painful bone metastases: an analysis of brief pain inventory assessments

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Background: The self-assessed Brief Pain Inventory (BPI) is a validated instrument with four 0-10-point pain severity questions and seven functional interference items (0=no interference, 10=complete interference). This study describes treatment outcomes as evaluated by the BPI following palliative radiotherapy (RT) and determines how they might relate to subjective quality of life (QoL) changes.

Methods: 33 unselected patients with bone metastases (15 breast, 11 prostate, 7 others) undergoing 39 courses of palliative RT (external beam 38, 89-Sr 1) completed the BPI before and 4 weeks after RT. A non-leading, dichotomized (yes/no) question of whether quality of life changed after radiotherapy was added to the questionnaire at follow up. Median external beam dose was 8 Gy single fraction (range 6 Gy to 30 Gy/10 fractions). Type and dosages of opioid analgesics were converted to morphine-equivalent dose (MED).

Results: The average pre- and post-treatment "worst pain" scores were 6.9 (SD 1.9) and 4.0 (SD 2.8), respectively ($p<0.001$). Overall response rate defined as reduction of worst pain score by 2 or more, without increase in MED, was 56% (22/39 treatments). Of the 39 treatments, 20 resulted in subjective change and better QoL: 13/20 were associated with pain reduction, but 7/20 had no obvious pain relief. Patients with better QoL experienced slightly greater reduction in worst pain score (mean change 3.1) than patients with no change or worse QoL (mean change 2.1), though not statistically significant ($p=0.35$). However, patients with better QoL reported a greater improvement in functional interference (mean change 2.3) than patients with no change or worse QoL (mean change 0.5), almost reaching statistical significance ($p=0.068$).

Conclusion: Improvement in pain intensity after RT is not necessarily associated with better QoL. Possible reasons will be discussed. Functional interference determined by the BPI appears to be a better predictor of improvement in QoL and may serve as an alternative outcomes measure for palliation. More data is needed to validate this observation.

935 POSTER

Neglected information needs of breast cancer patients and spouses

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Goal. This study investigated breast cancer patients and their spouses views on cancer related information in two settings, at the department of oncology and at the rehabilitation course.

Patients and methods. Patients and spouses surveyed at the clinic (AD, 56 patients, 28 spouses) were compared with those participating at a rehabilitation course (RC, 57 patients, 44 spouses). Logistic regression models were used to adjust for differences in demographic characteristics between the groups.

Results. In both groups the same proportion of patients reported to have felt involved in decision making sufficiently (60%), inadequately (27%), and 19% vs. 16% did not want to be actively participating in decision making. Eighty per cent of AD and 31% of RC patients were content with the available information ($p<0.001$) and 75% of AD spouses and 43% of RC spouses reported similarly ($p=0.008$). Higher education, younger age and shorter time (<1 year) since diagnosis indicated a greater need for information among patients, whereas among spouses only education level was associated with it. More information was needed on prognosis, cancer as a disease, its influence on daily life and treatment effects. Sixty-one % of couples agreed on the information obtained (kappa=0.221). In 36% of couples both the patient and her spouse reported to have received sufficiently information and in 26% they received insufficient amount of information. Spouses preferred physicians as key information providers.

Conclusion. This study revealed information needs, which were not met by the physicians, among breast cancer patients and their spouses. The expectation on the physician's role by breast cancer patient and her spouse includes that of a specialist giving the best possible treatment and providing realistic information both for the patient and her spouse.

936 POSTER

Long-term salivary output and quality of life in patients with head and neck cancer treated with radiotherapy

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Background: Quality of life and xerostomia have become important issues in the treatment of head and neck cancer. However, the long-term relationship between the individual's perception of a dry mouth, the objective salivary flow measurement and the quality of life has not been clearly defined.

The aim of this study was to describe the quality of life and the relation with salivary output in long-term survivors of head-and-neck cancer treated with radiotherapy with curative intent.

Material and methods: Forty-four patients with head-and-neck cancer treated with primary or postoperative radiotherapy, completed the European Organization for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire (QLQ) C30, and the EORTC-QLQ-H&N35 scale before treatment, and 6 weeks, 6 months, 12 months and at least 3.5 years after treatment. At the same times, stimulated bilateral parotid saliva flow rates were measured using Lashley cups.

Results: Quality of life scored worse at completion of radiotherapy compared to baseline, but showed improvement in time even after 12 months. The specific xerostomia related items, dry mouth and sticky saliva, were significantly worse at completion of radiotherapy, showed improvement in time and were remarkably better at 5 years than at 12 months post-radiotherapy, but did not reach the baseline. The other functioning scales and specific head-and-neck questions improved in time and were not significantly different from baseline at 5 years post-radiotherapy. Parotid flow rates diminished immediately after radiotherapy, and increased progressively in time to return almost to baseline 5 years after radiotherapy.

Conclusions: Quality of life scores followed the general pattern of salivary flow rates. The specific xerostomia related items, showed an improvement in time after irradiation, but kept worse than baseline. However, the salivary flow rates recovered in time. Possibly this discrepancy between the salivary flow rate and the subjective perception of a dry mouth lies in the damage of the submandibular glands. The dose to the submandibular glands might play a greater role then now known for the perception of a dry mouth. Special attention should be given to the xerostomia-related quality of life with parotid sparing irradiation.

937 POSTER

Superiority of aprepitant, an oral NK1 antagonist, over standard antiemetic therapy: Reducing the impact of nausea and vomiting on patients' daily lives.

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Background: Previous analyses have shown that patients treated with aprepitant, an oral NK1 antagonist, reported minimal or no impact of nausea (N) and vomiting (V) on daily life compared to standard antiemetic therapy following highly emetogenic chemotherapy. The objective of this report is to confirm those results using data from two multi-national randomized controlled Phase III clinical trials of aprepitant.

Methods: Patients receiving their first cisplatin-based (>50mg/m^2) chemotherapy received either standard antiemetic therapy (ondansetron [O] 32 mg i.v. and dexamethasone [D] 20 mg p.o. on day 1; D 8 mg twice daily on days 2-4) or an aprepitant (A) regimen (A 125 mg p.o. plus O 32 mg and D 12 mg on day 1, A 80 mg and D 8 mg once daily on days 2-3, and D 8 mg on day 4). The impact of N and V on patients' daily lives was assessed as a pre-specified secondary endpoint in both studies using the Functional Living Index-Emesis (FLIE), a validated nausea- and vomiting-specific patient-reported outcome measure. The FLIE contains two domains (Nausea, Vomiting) and had been translated, culturally adapted and linguistically validated into 22 languages for use at the clinical trial sites. Patients completed the FLIE 5 days post-chemotherapy in Cycle 1 of both studies. Minimal or no impact of N and V on daily life was pre-defined as an average item score >6 on the 7-point scale. Treatment comparisons were made using logistic regression.

Results: Approximately 98% (n=1014) of trial participants (n=1040; 38% female; mean age 59) completed the FLIE with less than 2% missing data. In this post-hoc pooled analysis, a significantly greater proportion of patients receiving the aprepitant regimen reported minimal or no impact of N and V on daily life over the 5 days post-chemotherapy compared to those on standard therapy (74.4% v 63.9%, $p<0.01$). This result is consistent with the results observed for each individual study. In addition, the aprepitant regimen was superior to standard therapy in the analysis of each domain wherein 70.2% v 60.9% ($p<0.05$) and 84.6% v 68.7% ($p<0.05$) met the definition of minimal or no impact on daily life for the Nausea and Vomiting domains, respectively.

Conclusion: Aprepitant-based antiemetic regimens have been shown to be consistently superior to standard antiemetic therapy in reducing the impact of nausea and vomiting on patients' daily lives following highly emetogenic chemotherapy.

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938 POSTER

Psychiatric morbidity in cancer patients and importance of awareness of disease

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Objective: There is a high prevalence of psychiatric disorders, especially depression and anxiety among the cancer patients. In case they're left untreated especially depressive disorders, may contribute to poor treatment compliance, increased hospital stays and reduced quality-of life. The aim of this prospective study is to investigate the prevalence of psychiatric morbidity among cancer patients and the relationship between awareness of cancer diagnoses and psychiatric morbidity.

Patients and Methods: One hundred and seventeen patients with the diagnosis of cancer who were treated in the clinical departments of the Pamukkale University Hospital situated in Denizli, Turkey were included in this study between September 2000 and May 2002. All of the patients in the sample had undergone chemotherapy. Informed concent was obtained from the patients after the patients were fully informed of the goals of the study. The patients were interviewed with the clinical Structured Clinical Interview for DSM-IV-Clinical Version (SCID-I/CV) form. In addition each patient had been evaluated with General Health Questionnaire (GHQ) to assess the health problems and with Hospital and Anxiety Depression Scale (HADS) in order to measure levels of anxiety and depression.

Statistical analysis: Chi squared tests or Fisher exact test for 2 X 2 tables were performed to examine the associations between psychiatric disorder and sociodemographic, personal and disease factors. Comparisons of median scores for anxiety and depression between groups (e.g. females vs males, the patient with pain vs those without pain) were performed using Mann- Whitney U test. Comparisons of group means were performed by unpaired t tests. The correlation between the scores of GHQ or HADS and duration of cancer was examined with Pearson correlation analyses. All data analyses were conducted with SPSS for Windows (10.0 version).

Results: This investigation of the prevalence of psychiatric disorders in cancer patients showed that 30% of, the patients studied met the criteria for a DSM-IV psychiatric disorder, and that the most common type of psychiatric disorders are adjustment disorders. According to the standardised interviews, 35 patients (30%) had a psychiatric disorder. The adjustment disorders account for 48.5% of all diagnoses and have an associated prevalence rate of 14.5%. The other most diagnostic class is the major depressive disorder whose prevalence rate is of 13.7% and which accounts for 45.7% of all diagnoses. It has also been found that psychiatric disorders are closely related to some factors such as the awareness of the disease, the period of illness, any previous psychiatric disorder, pain existence, stres factors or female gender ($p<0,05$)

Conclusion: Adjustment disorder with depressed mood and major depressive disorder was mostly diagnosed in this group of cancer patients whereas suicide ideations was in a lesser extend. On the other hand no existence of suicide attempts in our patients, in spite of a tendency, may be related to the sociocultural background and strong religious beliefs. Almost half of the patients (54%) knew that the diagnosis was cancer. The lower rate of awareness of cancer diagnosis shows that it isn't mentined to the patients unlike the approachments in the western countries. The results suggest that in Western countries there was a move towards openness between doctors and cancer patients and their families. Clinical experiences and research evidence suggest that many cancer patients are not well-informed about their diagnosis and prognosis, although relatives are informed in details in Turkey which is both an Asian and European and 1slam1c country as well. Psychiatric morbidity was significantly lower in patients who were unaware of the diagnosis of cancer and had a more hopeful outlook on the outcome of treatment. However, in the aware patients, the high level of psychiatric disorders is related to the adequate information gathered by the patient since especially his or her family doesnot allow the doctor to be honest to the patient and pursues to hinder the diagnosis. Especially the understanding of the diagnose indirectly, without having any satisfactory information, causes the individual to be stressed because of arousing suspect about cancer and treatment and consequently psychiatric disorders increase.

The results suggest that psychiatric approach to the cancer patient in order to diagnose the psychiatric morbidity as well as the medical therapy is of importance in clinical practice and GHQ and HADS are reliable and important tools to evaluate the psychiatric morbidity.

939 POSTER

Prevention of urinary tract infections by bladder instillations of hyaluronic acid in patients with metastatic acute medullar compression

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Background: This study examines the efficacy of hyaluronic acid (HA, Cystistat®) bladder instillations on the incidence of urinary tract infections in patients hospitalized for initial radiotherapy treatment of acute metastatic medullar compression (AMC). Such patients with a permanent catheterization are susceptible to a high incidence of urinary tract infections (UTI) due to damage caused to the glycosaminoglycan (GAG) layer of the bladder. Cystistat® is registered as a medical device approved for the temporary replacement of this GAG layer.

Material and Methods: The charts of 71 patients with acute metastatic medullar compression were examined. The patients had been admitted for emergency medullar decompression. The patients were consecutively