- Two evaluation questionnaires handed out, one regarding the booklet (100 patients between June and Sept.) and one the post-discharge outpatient service (Sept. 2005)

Results:

- Training of two expert nurses who can be contacted for all problems
- Identification of all appointment steps, procedures and operators
- SINFONIA: computerized report of all wound-dressing visits
- Dedicated telephone line: it makes it easier for patients to contact experts
- Multidisciplinary-Decision-Making database: all medical personnel can easily access
- Follow-up on wound infections and database collection
- Referrals: patients coming from other parts of Italy can be treated in their home town by physicians chosen by IEO
- Questionnaire on booklet: this was highly appreciated (over 50% of patients evaluated it 10/10)
- Questionnaire on outpatient care quality: First visit and surgery resulted as critical moments. On a 1−5 scale, the Service organization scored 4.73; personnel's competence 4.84; the informative booklet 4.88

Conclusions: Since April, this analysis has led to an improvement in care giving, testified by patients perceiving higher Quality in the Service.

The working was tidier and more systematic as well as more gratifying for all personnel. The dedicated nurse has a reference point for both patients and clinicians.

The number of telephone calls to both the ward and the dedicated line has decreased, proving that during post-discharge outpatient interview patients are given exhaustive information which aims at improving wellbeing at home.

8171 POSTER

Prevention of nail disorders by cooling of nails and fingertips in patients treated with docetaxel-based chemotherapy

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Background: Docetaxel (Taxotere®) is a cytostatic agent registered for treatment of different solid malignancies. Side effects of this treatment include nail disorders, characterized by hypo- and hyperpigmentation, with occasionally pain and ónycholýsis. Nail disorders occur in 10−44% of patients and are severe in 0.4−2.6% of the patients, depending on the dose and the combination regimen. Though not often reason for treatment discontinuation, the impact of nail disorders for individual patients can be substantial. This study investigates the efficacy of cooling of nails and fingertips in preventing docetaxel-induced nail changes and how patients feel about nail disorders and the cooling of nails and fingertips.

Materials and Methods: Patients receiving docetaxel-based chemotherapy, as single agent or in combination, regardless of primary tumour, treatment schedule and dose, were eligible for this study. Nails and fingertips of the left hand were cooled according to a specified standard method, while the right hand was not protected and acted as a control. Prior to every infusion with docetaxel, nail disorders were assessed according to the Common Terminology Criteria of Adverse events version 3.0, and colour-photographs were made of both hands. McNemar's test of equality of paired proportions was used to statistically evaluate the impact of cooling.

Results: Between May 2004 and October 2006 10 hospitals participated in the Netherlands with a total of 182 patients. Preliminary data show no nail toxicity in either hand in the majority of patients (94% after 2 courses, and 66% after 4 courses). In those patients experiencing nail toxicity, the incidence in the left hand as compared to the right is more than halved. Only about one third of all patients with nail toxicity experiences significant discomfort because of this side effect. Most patients tolerated cooling well, while12% experienced discomfort and stopped the cooling instrument.

Conclusion: Cooling nails and fingertips is feasible in a multicentre-setting. Although in our cohort nail toxicity occurred in only a minority of patients, cooling prevented nail toxicity in more than 50% of those affected. Results, conclusions and discussions will be presented.

8172 POSTER

Cancer rehabilitation nurse at hospital – where to begin?

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Background: In may 2006 Copenhagen University Hospital, Rigshospitalet decided to employ a cancer rehabilitation nurse for 20 hours a week to work with cancer rehabilitation involving patients and staff. A definition of cancer rehabilitation was stated by the Nordic Cancer Societies in 2004 and cancer rehabilitation is still a relatively new area in Denmark. There are few systematic offers of cancer rehabilitation at hospitals in Denmark to cancer patients, and cancer rehabilitation is only in few cases part of the cancer treatment.

In 2006 the Copenhagen University Hospital, Rigshospitalet had established a few systematic patient based cancer rehabilitation offers. There were patient education courses for women treated for gynaecological cancer, physical training for breast cancer patients, private organizations offer for example "Look Good – Feel Better", and a research project with multidimensional exercise program for cancer patients in chemotherapy.

Materials and Methods: The cancer rehabilitation nurse was placed with the development department of the hospital. To establish cancer rehabilitation at the hospital it was decided to divide the interventions in three sections: 1. Cancer rehabilitation for cancer patients. 2. Education to staff about cancer rehabilitation. 3. Research and development of cancer rehabilitation measuring at the hospital.

Results: Implementing cancer rehabilitation at the hospital is ongoing and at the ECCO 14 conference the author will present implemented cancer rehabilitation such as patient education before treatment for head and neck cancer patients in radiotherapy, developing a Guided Self-Determination sheet to identify rehabilitation needs among cancer patients, and an education course for staff about changing their behavioural pattern in patient education.

Conclusions: The cancer patient needs for rehabilitation must be identified at the hospital, and the staff should be trained to handle rehabilitation needs. Research and documentation is needed in this field.

8173 POSTER

Tracking patterns of fatigue and symptom clusters across the treatment continuum for allogeneic stem cell transplantation – a randomized clinical trial

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Background: The standard procedure for myeloablative allogeneic stem cell transplantation (allo-HSCT) entails a conditioning regime of high dose chemotherapy often in combination with total body irradiation (TBI), then infusion of stem cells harvested from a donor's bone marrow or peripheral blood. This procedure is followed by a two to four week period of severe leucopenia and thrombocytopenia experienced concurrently with related multiple symptoms.

Objective: To evaluate the benefits of a mixed type exercise & psycho-education intervention on the type, severity and pattern of commonly experienced symptoms during the treatment continuum for allo-HSCT.

Material and Methods: 20 adult patients (18−65 years) were randomized to either an intervention or a conventional care group. The intervention group received a multimodal programme: 4−6 week, 5 days/wk supervised mixed exercise program of stationary cycle-, resistance training, dynamic & static exercises and relaxation training and a cognitive based supportive and educational intervention. The conventional care group was offered standard physical therapy. All patients scored their symptoms on a scale from 0 to 4, using the Common Toxicity Criteria (CTC) weekly during hospitalization.

Results and Conclusion: Specific fatigue and symptom cluster patterns were identified throughout the continuum of treatment for both groups, ie. most prevalent was an increased tendency and intensity of psychological symptoms related to anxiety, nervousness and stress experienced at baseline, while fatigue and cluster symptoms were reported with increasing intensity during 1 to 4 weeks after chemotherapy and TBI. Upon discharge, most cluster symptoms were lessened in both groups, though there was a clear trend towards reduced fatigue intensity experienced in the intervention group. Understanding the patterns of fatigue and symptom clusters during allo-HSCT can assist in the development of important strategies in prevention and treatment.

8174 POSTER

Cancer symptoms cut points based on recursive partition analysis: effect on health-related quality of life

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Background: Symptom occurrence has been associated with reduction in survival, health-related quality of life (HRQOL), and performance status (PS). However, it is not clear what the symptom cut points are and how their interactions result in higher reduction in HRQOL and PS. Thus, this cross-sectional study was conducted to identify symptom cut points associated with higher reduction in HRQOL and PS, and if its effect on these outcomes were mediated by other symptoms.

Methods: A sample of 115 cancer outpatients was recruited in a university hospital, Sao Paulo, Brazil. The EORTC-QLQ-C30 was used to assess HRQOL (scores 0 to 100) and symptoms (1 to 4). Beck Depression Inventory (BDI) measured depression. PS was assessed by Karnofsky Performance Scale. The classification and regression tree (CART) analysis based on recursive partition analysis (RPA) was used to examine the data. The symptoms analyzed were: pain, depression, fatigue, insomnia, constipation, lack of appetite, dyspnea, nausea and vomiting, and diarrhea.

Results: For PS, the most important predictor symptom was pain. For patients who had pain intensity $\geqslant 3$, fatigue =3 was the next most important predictor and reduced PS from 73.8 ± 11.0 to 58.46, whereas for those with pain <3, fatigue was the most important predictor. For the physical HRQOL domain, fatigue was the most important predictor, and score $\geqslant 3$ was associated with 55.4% reduction in physical HRQOL score. For those who also had pain >3.5, the physical HRQOL reduced more 27.7%. For the cognitive HRQOL domain, nausea e vomiting (NV) was the most important factor. For patients with NV score >1.5, NV was the only one factor associated with reduction in QOL (from 68.84 to 46.03), but for those who had NV score $\leqslant 1.5$, insomnia was the next most important predictor. In the social HRQOL domain, insomnia was the most important factor associated with reduction. For those, with insomnia $\geqslant 2$, insomnia was the only predictor, but for patients with insomnia <2, the presence of any degree of dyspnea was the next most important predictor. For general HRQOL, the only one symptom associated with reduction in HRQOL was depression score >20. For those individual who had depression $\leqslant 20$, their HRQOL was significantly higher than average.

Conclusions: Different cancer symptoms present cumulative effect that result in reduction in performance status and different HRQOL domains.

8175 POSTER

Side effects at the time of rehabilitation as reported by more than 600 cancer patients in response to an open question and a structered, closed questionaire

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Our knowledge of side effects after cancer and its treatment is generally based on observations close to treatment. Much less is known about late complications months or years after treatment.

Purpose:

1. To identify and quantify the side effects reported by cancer patients at the time of rehabilitation.
2. To ascertain whether answers prompted by an open question yield results comparable to answers obtained by a structered, closed questionaire.

Methods: Before their stay at Rehabilitation Centre Dallund, each patient received a set of open questions related to the stay. One of the questions was: Do you feel discomfort, or do you have complications or side effects following your illness or treatment? The patients also received the Dallund Scale, which is a highly structered one page questionaire qualified to disclose the patients' need of rehabilitation. The scale contains the possibility of checking 64 different complications (practical, work- or family related, psychological, physical or spiritual factors). All 624 patients attending Dallund during 2005 received both the open question and the closed questionaire. the patients attended Dallund 1–107 months after treatment (mean 8.5; mode 2.0 months).

Results:

1. Both the number of different complications and the frequency of side effects picked up by the "open question" are significantly less than those checked on the Dallund Scale.
2. Approx 11% of the patients does not respond to the open question, but indicate complications on the Dallund Scale. Their profiles of side effects are similar to the rest of the patients.
3. Approx 5% of the patients simply state that they have "several complications" when answering the open question. When investigated by the Dallund Scale, these patients have profiles of side effects similar to the rest of the patients.

The profiles and side effects reported by these 624 patients will be presented.

8176 POSTER

Clinical practice guidelines on distress management in cancer care. Development and implementation at Landspitali-University Hospital in Iceland

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Introduction: It is well known that cancer patients experience significant distress during their illness continuum. It has been recommended that distress should be recognized, monitored, documented and treated promptly at all stages of disease (NCCN, 2006). An interdisciplinary team was formed at Landspitali to improve the evaluation and management of distress experienced by cancer patients. The team decided to translate and adapt the guidelines on distress management developed by the US National Comprehensive Cancer Network (NCCN).

Methods: The team has worked on translating and adapting the guidelines on distress management, and translating and adapting an information booklet for patients and their family members based on the NCCN clinical practice guidelines. The Distress Thermometer (DT) a brief screening tool for distress, a single item screening measure from 0 (no distress) to 10 (extreme distress) and a Problem List of 35 items, has also been translated and evaluated for it's psychometric properties. Implementation into clinical practice includes regular meetings with staff, and a conference has been held on the integration of psycho-oncology into cancer care. A pilot test of the guidelines, screening tool and information booklet is scheduled for spring and summer of 2007, followed by a full implementation and evaluation of the project.

Results: The psychometric evaluation of the DT supported that the screening tool is valid, reliable and feasible to use. The results showed a cut-off point of 3 and it took an average of 5 minutes to complete the DT and the Problem list. In the work process a number of challenges have been encountered relating to the translation and adaptation of the guidelines, and the adaptation of new practices. The project is ongoing and a full implementation is scheduled in fall of 2007.

Conclusion: The psychometric evaluation of the DT has added to the growing literature supporting its use both in clinical work and research. The planned evaluation of the guidelines and patient information booklet will determine their usefulness in improving screening and management of distress in cancer patients and hopefully encourage further work on the use of the NCCN'S clinical practice guidelines on distress management.

8177 POSTER

Quality of life and rehabilitation needs of Icelandic patients receiving chemotherapy, longitudinal study

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The diagnosis and treatment of cancer is known to affect quality of life (QOL). Interest in examining QOL of Icelandic cancer patients is increasing, however longitudinal studies have not yet been performed.

The purpose of this study was to describe QOL and to assess rehabilitation needs, over time in a group of Icelandic cancer patients receiving chemotherapy. QOL and rehabilitations needs were measured with the Icelandic version of CARES-SF (CAncer Rehabilitation Evaluation System, Short Form). CARES-SF contains 59 problem statements, divided into five QOL dimensions. Possible range of the Global QOL score is 0−4, higher scores indicate worse QOL. Rehabilitations needs are evaluated by asking the respondent if he wants help with a particular problem.

The first measure was completed by 144 patients, at the initiation of a chemotherapy protocol (T1), 109 and 89 patients completed the second (T2) and third (T3) measure after three and six months, respectively. Enrolled into the study were 90 women and 54 men, mean (SD) age was 55 (12.1) years. The participants had a variety of cancer diagnoses, 91 (64%) had advanced cancer, and median time from diagnosis was 4 weeks. Participants were receiving a variety of chemotherapy protocols.

Global QOL score (SD) was found significantly higher at T2 (0.96 (0.53)), and T3 (0.90 (0.50)) compared to baseline (0.70 (0.43)). The score at T3 indicates improvement of QOL, however the difference was not significant. At all time points the global QOL score was found highest in the sexual and the physical dimensions. Demographic and disease variables were not found significantly related to quality of life, with the exception of age. Those who were older experienced better quality of life compared to those who