Results: 100 patients, fifty six females and 44 males age range 25–69 years, mean age 57.2 years were recruited into the study. The median survival of patients from the date of interview was 34 days. The prevalence of depression according to PSE criteria was 22%. The means score on the HAD depression sub scale was 8.9 and at cut off threshold of eight, 63% scored at this level or above and when the threshold was increased to eleven, 32% scored at this level or above. At a threshold of 8, the sensitivity was 81% and specificity 42% and at a cut off of 11 the sensitivity was 54% and specificity 74%. Patients were found to score highly on two question on feeling slowed down and the loss of enjoyment.

Conclusions: The depression sub scale of the HAD scale has lower sensitivity and specificity for detecting cases of depression in terminally ill patients that, in reported studies of patients with early or stable disease and mis classifies patients as cases of depression. The absence of somatic symptoms which have made the HAD scale popular for use with medically ill patients does not appear to influence the poorer discriminatory value of this scale in the terminally ill population. These factors should be taken into account when the HAD depression scale is used for research or in the clinical setting in patients with advanced metastatic disease.

1487 PUBLICATION

Reference center on quality of life in oncology: First results

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Quality of Life (QoL) became one of the most important outcome variables in modern medicine. During the last ten years reliable measures of QoL especially in oncology have been developed. Today's challenge is to incorporate these measures in clinical quality assurance programs and to establish QoL measures as clinical routine. Therefore the German Cancer Help (Deutsche Krebshilfe e.V.) granted a "Reference Center on Quality of Life in Oncology". Overall aim of this center will be the collection of information on any activity or study outcome relevant to QoL. Accordingly the scope of this center will be to support actively studies and activities on outcome research with focus on QoL and/or patients satisfaction.

The mandate of the reference center ranges from methodological counseling on how to assess QoL in a given setting, to participate in (multicenter) trials that incorporate QoL and to realize own specific research including the development of new instruments to measure QoL in specific oncological settings. The long-term aim of this project is to establish a databank on QoL for most tumor entities and in different treatment modalities, accessible for all care providers as well as for patients. Therefore the close cooperation with the German Cancer Society ("Deutsche Krebsgesellschaft") is mandatory. The philosophy of the center is that of a service unit for the oncology community.

The extend to which the offered services has been used is surprising: After one year of service the center is part of more than 40 studies/projects on QoL in oncology. These studies range from small exploratory studies in new fields of QoL in oncology (i.e. after PEG placement or in terminal care) to large multicenter trials (i.e. the National Kidney Cancer Project). Examples of results as well as of common problems in this field of research will be presented.

1488 PUBLICATION

The Quality-of-Life in the course of radiotherapy

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Purpose: The Quality-of-Life-Questionnaire QLQC-30 of the EORTC is a well known and valid instrument for measuring the Quality of Life (QoL) by focusing on the disease and treatment related syptoms of cancerpatients. Little research has been conducted investigating the changes in the QoL of cancerpatients in the course of a radiotherapy.

Method: NT1-T3 = 30 cancerpatients with various diagnosis received the QLQC-30 (german version) at three points of measurement: before (T1), during (T2), and after (T3) a six week radiotherapy.

Results: Significant changes from T1 to T2 could be found for five items: the patients felt weaker (31%), more nauseated (28%), more tired (34%), less anxious (54%), and had more difficulties to remember things (34%). Just one significant change could be found for the difference between T2 and T3: the patients felt less tired (36%).

Conclusion: There are significant changes in important components of QoL during a radiotherapy. Our study shows that the QLQC-30 is sensitive to the well known negative side effects of irradiation. Further studies will estimate the amount of the irradiation impact upon the QoL.

1489 PUBLICATION

The comparison of radiotherapy and radiotherapy plus pamidronat on pain palliation of metastatic bone disease

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Purpose: Radiotherapy (RT) and RT plus pamidronat were compared on the palliation of pain in patients with multiple bone metastasis.

Methods: Forty-nine patients with multiple bone metastases and had pain at least one part of his/her body included in this study. Twenty patients had RT (Group A), 29 patients had RT plus pamidronat (Group B). RT was applied 400 cGy/fr, totally 2000 cGy. Sixty mg pamidronat was given by intravenous infusion in 500 cc 5% dextrose during 2 hours. The mean follow-up period was 8.5 (11 months in the group A and 9.5 (4.2 months in the group B. There was no statistically significant differences in pre-treatment pain scores (subjective pain scores 0, 1, 2, 3) between groups (2.8 (0.41 in the group A, 2.7 (0.47 in the group B, $p = 0.428$)

Results: The post-treatment pain scores were 0.40 (0.51 in the group A and 0.45 (0.75 in the group B. No statistically significant difference was present ($p = 0.661$). At the end of the 3, 6 and 12 months, there was statistically significant decrease in pain scores in the group B. The values as follows: 0.85 (0.67 in the group A, 0.40 (0.50 in the group B ($p = 0.016$) at the end of the 3 months, 0.90 (0.70 in the group A, 0.27 (0.46 in the group B ($p = 0.046$) at the end of the 6 months, 1.8 (0.44 in the group A, 0.80 (0.73 in the group B ($p = 0.034$) at the end of the 12 months. At the end of the 3 months, there was no need for further RT but the need for analgesic was 22% in the group A, 7% in the group B. At the end of the 6 months, while RT was applied in group A, there was no need for RT in group B. The need for analgesic was 8% in the group A, 12% in the group B. At the end of the 12 months, RT was repeated 33% of patients in the group A and 10% in the group B. The need for analgesic was 20% and 15%. In the group A, two patients died at the end of the 3 months, 5 patients at the end of the 6 months, 3 patients at the end of the 12 months. In group B, 3 patients died at the end of the 3 months, 3 patients at the end of the 6 months, 4 patients at the end of the 12 months. We observed no side effects of RT, but there was nausea in 2 patients after pamidronat injection.

Conclusion: The RT and pamidronat combination provides more effective and long duration palliation at painful bone metastases compared only with RT.

1490 PUBLICATION

Limphoedema after breast cancer therapy – Surgical aspiration

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Introduction: The lymphoedema of the upper limb after breast cancer therapy is a long term morbidity event that ranges about 20% of women submitted to this therapy. Its treatment is classically conservative, with compression therapy (elastic garments), manual lymph drainage therapy and symptomatic medication. The different surgical approaches in an attempt to re-establish the lymph drainage had never shown good long-term results. Therefore, we developed a program of reducing volume by surgical aspiration in association with compression therapy.

Patients and Methods: We just included in this program women with lymphoedema that were adapted to the use of compression garments and that had been resistant to all the conservative treatments.

The surgical technique consists in to remove the hypertrophied and edematous fat by vaccum aspiration, through two 0.5 cm long incisions in the wrist and two identical incisions in the elbow. Between March 1991 and October 1998, 18 women, with a mean age of 61.4 years were submitted to this treatment.

Results: The median volume of the aspirate was 1650 ml (600–2900) and the percentual reducion of arm volume ranged between 9 and 43%. There was no complications. The median follow-up is of 65.8 months (6–96).

Conclusion: Surgical aspiration combined with permanent compression therapy is a palliative treatment that controls ann lymphoedema contributing to a significant improvement of quality of life of these patients.