

psychometric properties of the QLQ-C30 in 32 countries with a database of 9000 patients.

**Method:** All EORTC studies incorporating the EORTC QLQ-C30 were systematically selected for this study. Inclusion criteria for trials were if the trial contained the QLQ-C30 (version 1, 2 or 3) and if patient responses had been coded into the EORTC database. Given that a number of studies were still in early stages of recruitment, a total 114 EORTC studies were reviewed of which 52 met the criteria for being included in the final analysis. Review of the original protocols was conducted to identify variables characterising trials.

**Results:** Of the 52 studies meeting inclusion criteria the majority were palliative based treatment trials. The majority of cancer patients were Melanoma, Prostate, Head and Neck, Breast and Lung.

Missing data range from 14% to 17% of patients having at least 1 item missing though the average percentage of missing items per patient range from 1.1% to 1.5% which in turn yields an average 0.7% to 0.9% of missing scales per patient. In particular items relating to Role Functioning and Financial Difficulties were the most common items missing (3%).

Factor analyses for all 3 versions of the questionnaire are similar, though some difference has been found when examining individual cancers. Interdomain correlations, in each of the 3 versions of the QLQ-C30 were strongest in Role Functioning, Pain and Global Health Status.

Cronbach's reliability measure shows constant or increased reliability in newer versions of the questionnaire, for example, the pain scale increases from 0.82 to 0.86 from version 1 to version 3.

**Conclusion:** We believe this is one of the first studies to examine the scales of all three versions of the QLQ-C30 with a large sample across a large number of countries. We found that in general all 3 versions of the QLQ-C30 have similar psychometric structures and that the measure proves to be a useful tool to use within a clinical trials setting and that missing data is continually reducing over time, indicating increasing compliance among staff/patients.

1309

POSTER

### Factors influencing arm morbidity after surgery and radiation therapy in breast cancer

J. Irdesel<sup>1</sup>, L. Ozkan<sup>2</sup>, S. Cetintas<sup>2</sup>, U. Kayisogullari<sup>2</sup>, K. Sivrioglu<sup>1</sup>, O. Ozcan<sup>1</sup>, I. Tasdelen<sup>3</sup>, A. Saran<sup>2</sup>, K. Engin<sup>2</sup>. <sup>1</sup>Uludag University Medical College, Physical Medicine, Bursa, Turkey; <sup>2</sup>Uludag University Medical College, Radiation Oncology, Bursa, Turkey; <sup>3</sup>Uludag University Medical College, General Surgery, Bursa, Turkey

**Purpose:** The aim of this study was to determine the factors influencing arm morbidity in patients with breast cancer after surgery and post-operative radiation therapy.

**Materials & Methods:** Four hundred and sixty nine patients with breast cancer treated at the Department of Radiation Oncology, Uludag University Medical College were included in this study. Arm edema and range of motion of shoulder were evaluated as arm morbidity. Possible factors evaluated were patients' age, menopausal status, stage of disease, nodal stage, presence of extra-capsular invasion, number of removed and involved lymph nodes, dose of axillary radiotherapy, chemotherapy and hormonal therapy. Mann-Whitney-U test was used for uni-variate analyses while logistic regression was used for multivariate analyses.

**Results:** Seventy-seven patients (16%) had severe limitation in the range of motion, while sixty-seven (14%) had severe arm edema. Median age was 51 years (ranging between 26-86). Radiation dose of the axilla over 40 Gy, advanced stage, receiving chemotherapy, advanced nodal stage, >4 involved lymph nodes and age older than 70 years were found to be negative prognostic factors for arm edema in uni-variate analyses while radiation dose of axilla over 40 Gy and age older than 70 years were the most significant prognostic factors in multivariate analyses. Advanced stage, advanced nodal stage, type of operation (modified radical mastectomy instead of lumpectomy and axillary dissection) and >4 involved lymph nodes were detected as negative factors for motion of shoulder in uni-variate analyses. Advanced stage was the sole independent prognostic factor for motion of shoulder.

**Conclusion:** Advanced stage, radiation dose of axillary region and age older than 70 years might be considered as negative factors for arm morbidity in patients with breast cancer after surgery and post-operative radiotherapy.

1310

POSTER

### Quality of life of malignant lymphoma patients during and after conventional chemotherapy

A. Novik, T. Ionova, A. Povzun, A. Kishtovich. *Military Medical Academy, Multinational Center of Quality of Life Research, St.-Petersburg, Russian Federation*

Quality of life (QoL) is one of the important outcomes of cancer treatment. The purpose of the research was to study QoL dynamics during and after conventional chemotherapy (CT) of malignant lymphoma patients. Methods: 110 malignant lymphoma patients (63 - non-Hodgkin's lymphoma patients, mean age 50.5, 59% males; 47 - Hodgkin's disease patients, mean age 30.3, 49% males) were studied. Non-Hodgkin's lymphoma and Hodgkin's disease patients were treated by 6 or 8 courses of CHOP and COPP-ABV respectively (6 courses in case of CR after 4 courses, 8 - in case of PR). EORTC QLQ-C30 questionnaire was administered before treatment, after 1 and 4 courses of CT, after the end of CT and at the 3-month follow-up. Statistical analysis was provided by ANOVA method (p less than 0.05). Results: After the first course of CT a 12% improvement in emotional functioning (69.2 vs 77.4) and a 17% increase in general quality of life (45.9 vs 53.6) was observed as compared to baseline. At the same time there was a two-fold deterioration in nausea and vomiting scale (8 vs 16.7) and an increase in dyspnea (19.7 vs 26.6) as evidence of treatment toxicity. After 4-th course of CT decreases in pain (30.3 vs 19.8), insomnia (35.7 vs 24.9) and constipation (10.8 vs 6) levels were registered. After the end of treatment emotional functioning (69.2 vs 79.3) and general quality of life (45.9 vs 57.1) values were higher as compared to base-line. There were significant decreases in fatigue (41.7 vs 33.8) and insomnia (35.7 vs 23.2) as well. At the 3-month follow-up further increase in emotional functioning (69.2 vs 88.2) was found. Moreover the improvements of role (72.2 vs 88.3) and social (68 vs 90.3) functioning were accompanied by better general quality of life (45.9 vs 75) as compared to baseline. Conclusions. Conventional CT results in better QoL of malignant lymphoma patients. During treatment emotional functioning and general quality of life improve, and in doing so symptom manifestation decreases by the end of CT. Short-term follow-up is accompanied by the improvement in emotional, role and social functioning and general quality of life.

1311

POSTER

### Malignant bowel obstruction in advanced ovarian cancer: "does that mean I am going to starve to death?"

R. Penfold, A. Whitfield. *Christie Hospital NHS Trust, Palliative Care Team, Manchester, UK*

Ovarian cancer is responsible for 5 000 deaths in the UK and 25 000 deaths in the USA each year. Between 25-59% of these women die as a consequence of bowel obstruction from advanced malignancy. For those patients for whom surgical palliation is not possible, the median survival after the development of bowel obstruction is 30 days. It is reasonable to assume that death is accelerated in this patient group by the absence of nutritional support. Where symptom control is good and bowel obstruction is the only life-threatening problem, parenteral nutrition (PN) could be an eligible treatment option.

This poster aims to stimulate discussion among health care professionals, and subsequently with patients, of all aspects of such a treatment decision. The issues to be addressed include:

- \* challenging the distinction between ordinary and extraordinary life-prolonging PN

- \* ethical considerations of informed consent, beneficence and justice.

This presentation will not claim that PN per se improves quality of life in bowel obstruction but maintains life where symptoms can be reasonably managed. If it also prolongs life in the terminal phase then that is a goal worth achieving. Conclusion: In this context PN should be discussed openly among the team, the patient and her carers. Such discussion and practice will begin to redress the dearth of evidence determining the potential value of PN in this setting.