

moderate. At randomization, there is no difference in assessment of QL in the 2 treatment arms. Compared to time of diagnosis, patients don't show significant changes in QL after 3 courses of CE and again no changes after combined radio-/chemotherapy or radiotherapy/surgical resection.

**Conclusion:** Evaluation of innovative treatment for NSCLC Stage III includes QL as an important patient outcome parameter. The first analysis of the study shows that intensive therapy is not associated with a decrease in QL.

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### Quality of life as outcome criteria of psychosocial rehabilitation program

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**Purpose:** Improving coping skills and functional levels of quality of life are the most important outcome criteria of inpatient rehabilitation programs. Evaluation of such programs is important with respect to the quality assurance, definition of rehabilitation needs and the problem of differentiated indication for such programs.

**Methods:** Patients with various tumor diagnoses undergoing an inpatient rehabilitation program were studied (N = 84: 32.1% breast cancer, 23.8% gastrointestinal Ca, 17.9% gynaecological Ca, 9.5% hematological Ca, 23.8% others) in a longitudinal approach measuring at the beginning of the program, at the end and six months later. Patients' coping (FQCI Muthny 1989), quality of life (EORTC-QLQ-C30 Aaronson et al. 1993) and psychological wellbeing (depression and anxiety scales of the BSI, Derogatis & Melisaratos 1983) were measured as outcome criteria. Additionally, rehabilitation needs were assessed by self- and observer ratings.

**Results:** The results showed significant improvements in quality of life and emotional wellbeing at the end of the program, whereas no changes were found concerning the coping skills. At the 6 months follow-up most of the scores decreased down to the base line level at the beginning of the program.

**Conclusions:** The results show the relevance of outpatient aftercare helping the patients to stabilize the success of the program.

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### The acceptance of psychosocial intervention by a group of breast cancer patients

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**Purpose:** The significance and need for a psychosocial supportive therapy is no longer a controversial issue in breast-carcinoma patients.

**Methods:** 54 patients (primary therapy in 1994) were contacted, 33 patients (primary therapy in 1995) were informed of possibly participating in a group formed for coping with the disease during their post-operative hospitalization period. We examined the compliance and comparison factors in both groups (participants and decliners), using immunological and psychological parameters. Two sample groups were derived from the larger group: 23 patients taken from both intervention groups already in session were compared to 28 definite decliners of the project with respect to immunological and psychological variables.

**Results:** One third of the contacted women would be or are already interested in participating in psychosocial intervention therapy. The acceptance of group participation subsequent to hospitalization is minimal. The majority of patients who received group therapy following adjuvant therapy was interested in psychosocial group therapy. Immunological comparison of both sample groups did not show any significant differences. Increased depressive states were noted in the participants.

**Conclusion:** The definitive factors in determining compliance are the consultation with psychotherapist and the timing chosen for the intervention. Early intervention seems to pose a strain. The earliest psychosocial therapy should begin after adjuvant therapy.

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### Aromatherapy as an anxiety management programme for patients with cancer

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Massage and aromatherapy massage are increasingly being offered to cancer patients but there is little research to demonstrate their efficacy. A study was set up to evaluate the effectiveness of massage and aromatherapy massage in improving the quality of life for patients with advanced cancer. A series of 103 patients were randomly allocated to receive either: massage or aromatherapy massage.

Each patient received three massages over a three week period and completed:

(1) The Rotterdam Symptom Checklist (RSCL) before the first massage and one week after the last massage.

(2) The Spielberger State/Trait Anxiety Inventory (STAI) before and after each massage.

The data were analysed using SPSSX, non parametric statistical tests included the Mann-Whitney U Test and Wilcoxon Matched Pairs Signed Ranks test.

Final results of the study (preliminary results Wilkinson 1995) indicate pre massage there were no differences between the aromatherapy and massage patients on the STAI or RSCL except the quality of life subscale. Post massage there were no differences between the massage and aromatherapy patients on the RSCL or STAI.

All patients had a reduction in anxiety after each massage on the STAI and improved scores on the RSCL ( $p = 0.0001$ ), psychological ( $p = 0.001$ ) and quality of life subscales ( $p = 0.01$ ). The aromatherapy patient change scores improved on all RSCL subscales except for functional status at the 1% level of significance. The change scores for the massage patients improved but did not reach levels of statistical significance.

Aromatherapy massage appears to reduce anxiety and could be used as an anxiety management programme. To evaluate this, a larger sample is needed. A multi-centred study has been set up, this will briefly be described.

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### Psychologic strain of patients in a follow-up program after curative resection of colorectal carcinoma

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**Purpose:** The follow-up program after curative resection of colorectal carcinomas belongs to the common examination of the daily work in most surgical departments. The physical and psychologic strain for the patients because of the partly invasive examinations are not inconsiderable. Although the change of quality of life after gastrointestinal operations has been subject of multiple scientific publications, the psychological aspects due to the regular follow-up examinations, have been ignored so far.

**Methods:** In a prospective study 70 patients after curative resection of colorectal carcinoma were asked about psychological strain due to the follow-up program.

**Results:** 80.1% of the patients felt that they did the right thing and 70% were optimistic and confident regarding the follow up examinations. Only 5 patients (7.1%) had no intention to take the follow-up appointment and 12 patients (17.1%) were thinking about recurrence. The patients were afraid of further examinations, the majority of 45 patients hoped further invasive examinations would not be necessary. Patients with a higher frequency of follow-up examinations did not report of more stress than patients having a lower frequency of follow-up visits ( $p = 0.7$  fisher exact). Older, single and female patients are special risk groups with a high level of psychological strain and should receive special attention within the follow-up ( $p < 0.08$ , fisher exact).

**Conclusion:** In spite of the disappointing medical effectiveness of the regular follow-up program the psychological support in coping with cancer is a main effect of regular follow-up visits and should be maintained.