

strength in arm and 19% had strenuous work postures. 60% were on SL and 39% had RTW. 33% had a complete and 67% a partial mastectomy, 38% had a total axillary clearance and 56% had sentinel node dissection only. Results from multivariable analysis of those, as well as potential confounding factors will also be presented.

**Conclusions:** Today there is an ongoing debate about the optimal individual length and grade of SL after cancer and in Sweden national guidelines are present. These results will give insight in clinical relevant factors of importance for whether women are on SL or RTW short after BC surgery.

## Oral Presentations (Sat, 24 Sep, 16:00–18:00) Nursing Oncology – Symptoms

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ORAL

### Improving Pain Management Due to a Combination of a Pain Consult and Pain Education in Oncology Outpatients

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**Background:** Pain Education Programs (PEP) and a Pain Consult (PC) have been studied to overcome patient and professional barriers in cancer pain management. These interventions were only studied separately, with several methodological flaws. Only half of the studies described a significant effect on pain. Moreover, PEP studies could hardly prove an effect on daily interference or adherence. Most PEP studies did not mention the adequacy of pain treatment. We compared PEP combined with PC versus standard care (SC) to study the effect on pain, functioning, knowledge and adherence.

**Methods and Analysis:** This Randomised Controlled Trial was set up a 3-arm study in outpatients with cancer pain, to compare (1) SC, (2) PC by a pain specialist and (3) PC combined with PEP (PC&PEP) (NTR613). PEP consisted of tailored pain education and weekly monitoring of pain and side effects. Because of slow accrual the design was changed in a 2-arm study that compared (1) SC to (3) PC&PEP. The Brief Pain Inventory was used to measure pain and daily interference (BPI-I); knowledge was measured using Ferrell's Pain Questionnaire and electronic vials were used to measure adherence. The primary endpoint was an overall reduction in average pain intensity (API) over an 8-week period compared to baseline. Secondary endpoints were current and worst pain intensity (CPI & WPI), BPI-I, knowledge and adherence. 72 Patients were planned ( $\alpha=0.029$ ,  $\beta=0.80$ , one-sided t-test). Data were analyzed using non-parametric tests. The study protocol was approved by the Institutional Review Board of the Erasmus MC. All patients gave written informed consent.

**Results:** Group 1+3 included 72 patients, mean age 59 years (sd=11), 65% female. The groups were similar with respect to performance and underlying cancer. WPI and adequacy of pain management did not differ between groups. The overall reduction in API was SC 1.13; PC&PEP 1.95;  $p=0.03$ . The reduction in CPI was SC 0.67; PC&PEP 1.50;  $p=0.016$ . The reduction in BPI-I was SC 0.11; PC&PEP 0.91;  $p=0.01$ . Pain knowledge increased significantly in PC&PEP compared to SC ( $p=0.008$ ). Patients in PC&PEP were more adherent than SC ( $p=0.03$ ).

**Conclusions:** The combined intervention significantly improved patients' pain, daily functioning, adherence and pain knowledge. Pain Consult and PEP should be regularly offered in oncology outpatients with pain. Study is closed.

This work was supported by the Erasmus MC Health Care Research and the Erasmus MC Revolving Fund.

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### Cancer's Related Anxiety "Kryptonite" – a Randomized Control Trial for the Use of Guided Imagery and Progressive Muscle Relaxation

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**Trial Registry Number:** AC-GIPMR-85

**Trial sponsor:** Cyprus University of Technology

**Background:** Patients' with cancer psychological well-being can be negatively influenced by the disease or the treatment, resulting in frequent

hospitalizations and disruption of the patients' daily living. This paper reports a part of a study to explore the effect of Guided Imagery (GI) and Progressive Muscle Relaxation (PMR) on the anxiety experienced by patients with prostate and breast cancer undergoing chemotherapy or/and radiotherapy.

**Material and Methods:** A Randomized Controlled Trial was implemented with a sample size of 200 patients with breast and prostate cancer covering all the geographical regions in Cyprus. Anxiety was assessed with the Zung Self-Rating Anxiety Scale prior and post intervention.

One hundred patients were randomly assigned in the control group and one hundred in the intervention group. Based on the protocol, the patients in the intervention group received 4 supervised sessions of GI and PMR at their home within a 4-week period, additionally, to daily unsupervised interventions through audiovisual aids.

Guided Imagery is simply the use of one's imagination to promote mental and physical health. The patient was led through a relaxation and imagery exercise. The first component involved reaching a state of deep relaxation through breathing and PMR techniques. During the relaxation phase, the person closes his/her eyes and focuses on releasing the feelings of tension from his/her muscles starting with the toes and working up to the top of the head. Once complete relaxation is achieved, the second component of the intervention is the imagery, where mental images (floating on a cloud) were directed to the patient.

**Results:** The matched pair t-test was used to assess the statistical significance differences in the pre- and post-intervention scores. Comparisons were considered significant if  $p < 0.05$ . For the control group, the mean score of SAS was  $58.33 \pm 7.45$ . For the intervention group, the SAS score was  $56.28 \pm 6.39$  and  $42.72 \pm 6.81$  before and after the intervention, respectively. For the intervention group, the difference between pre- and post-intervention scores reached the significant level ( $p = 0.01$ ).

**Conclusions:** Results showed that the GI and PMR had a significant effect on decreasing anxiety in cancer patients. Results indicated that complementary interventions have a place in an integrative system of home-based cancer care and can work side to side with conventional interventions to improve the patient's cancer journey and overall quality of life.

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### Managing Breakthrough Cancer Pain – New Nursing Guidelines

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**Background:** Breakthrough Cancer Pain (BTCP) is a taxing symptom that is often poorly understood and sub-optimally treated which can contribute to unnecessary patient discomfort that can impact their daily lives. Possible contributors to BTCP under-treatment include no universally accepted definition of BTCP, disagreements about what constitutes a BTCP episode, and lack of a validated BTCP assessment tool for clinical use. A European survey of oncology nurses' understanding of, and practice patterns relating to, BTCP management revealed not only an unmet educational need, but also a need for nurse-specific guidance on BTCP treatment and how to manage these episodes in cancer patients.

**Material and Methods:** Utilising the framework for generating existing EONS Guidelines, the EONS BTCP Working Group took on the task to develop a set of nurse-specific evidence- and practice-based guidelines on BTCP management. The BTCP Nursing Guidelines reflect the findings of the European oncology nurse survey and are the first to address BTCP management from a nurse perspective.

**Results:** The EONS BTCP survey amongst oncology nurses in 12 European countries revealed that nurses who have not been trained in BTCP management and/or do not have an assessment tool, not only find it more difficult to distinguish BTCP from background pain but also feel less confident in advising patients about BTCP. The BTCP Nursing Guidelines serve as an evidence- and practice-based guide to nurses working with cancer patients. The key objectives of the guidelines include: (1) to outline the nurses' role in identifying and assessing BTCP, (2) to describe how BTCP is recognised and (3) to offer a definition and a specialist aligned BTCP assessment tool to help nurses clearly distinguish between BTCP and background pain. Additionally, the guidelines describe how this type of pain influences cancer patients' everyday life by demonstrating the implications of unmanaged BTCP and provide guidance as to how to best manage these episodes.