

**Results:** Factors predicting higher scores on body image at follow-up are age ( $p < 0.05$ ), not receiving chemotherapy ( $p < 0.05$ , except Time-2), lower scores on neuroticism ( $p < 0.01$ ), higher scores on agreeableness ( $p < 0.01$ ). Body image changed significantly over time [ $F(4,241) = 3.1$ ;  $p = 0.015$ ]. An interaction effect was found between time and surgical treatment, indicating that women with mastectomy (MTC) scored differently on body image than women with benign breast problems or breast-conserving therapy (BCT) [ $F(8,482) = 1.95$ ;  $p = 0.51$ ]. From Time-1 to Time-2, women with MTC reported a significant deterioration in their body image ( $p = 0.035$ ). Overall, women with benign breast problems and women with BCT and MTC did not score differently on body image, except at Time-2 ( $p < 0.036$ ).

**Conclusions:** One year after surgical treatment little changes were found in body image scores in benign patients as well as breast cancer patients who underwent either BCT or MRM. A decrease in body image was only seen in MTC patients, however, time seemed to be an important factor in renewing the satisfaction with appearance. Knowledge about the risk factors will help professionals to identify women who are at risk of adjustment problems and consequently provide adequate support.

#### 84 Poster Psychological distress in breast cancer patients: depression, anxiety and post-traumatic stress disorder in different phases of the disease

V. Sanna<sup>1</sup>, A. Fancellu<sup>2</sup>, M.I. Sotgiu<sup>3</sup>, M. Contu<sup>3</sup>, M.G. Alicicco<sup>3</sup>, A.S. Cuccu<sup>3</sup>, A. Contu<sup>3</sup>. <sup>1</sup>Azienda ASL n. 1, Dept of Oncology, Sassari, Italy; <sup>2</sup>Institute of Clinica Chirurgica University, Dept of Surgery, Sassari, Italy; <sup>3</sup>Azienda ASL n.1, Dept of Oncology, Sassari, Italy

**Background:** Breast cancer patients are at risk for developing psychological distress and psychiatric disorders such as major depression (MD), anxiety disorders (AD) and post-traumatic stress disorder (PTSD). However, few studies have investigated psychological distress in breast cancer patients during the different phases of their disease. The main aim of this study is to investigate, with appropriate tools, the occurrence of MD, AD and PTSD in a population of breast cancer patients during the clinical course of their disease. We also propose a structured way to detect distress.

**Materials and Methods:** A total of 67 patients, divided into 3 groups was included in the study: Group 1 (G1) eighteen patients that were evaluated at the time of breast cancer diagnosis; Group 2 (G2) thirty patients that were evaluated at the time of cancer recurrence; Group 3 (G3) nineteen patients with no evidence of disease (NED) at 5-year follow-up. Five key tools were used: a semi-structured psychological interview, the NCCN Distress Thermometer, the Hamilton rating scale for depression, the Hamilton anxiety scale, and the Davidson trauma scale. All patients were evaluated at baseline (T0) and after six months (T1).

**Results:** Forty-nine of 67 patients (73%) completed both the questionnaires and the semi-structured interview: 15 patients for G1, 20 patients for G2, and 14 patients for G3, respectively. Using the distress thermometer and a semi-structured psychological interview we found a high level of psychological distress in 13/15 patients (87%) at time T0 and in 9/15 (60%) at time T1, (G1); in 18/20 (90%) and in 16/20 (80%), (G2); 7/14 (50%) and 6/14 (43%), (G3). We found a prevalence of depressive disorder of 34%: 10/15 (67%) at time T0 and 5/15 (33%) at time T1, (G1); 8/20 (40%) and 7/20 (35%), (G2); 2/14 (14%) and 2/14 (14%), (G3). We found a prevalence of anxiety of 14.5%: 3/15 (20%) at time T0 and 2/15 (13%) at time T1, (G1); 4/20 (20%) and 4/20 (20%), (G2); 1/14 (7%) and 1/14 (7%), (G3). As for PTSD, we observed a mild level of this disorder, with a prevalence of 5.6%: 2/15 (13%) at T0 and 1/15 (7%) at T1, (G1); 2/20 (10%) and 2/20 (10%), (G2); 1/14 (7%) and 1/14 (7%), (G3).

**Conclusions:** Because of the high proportion of distress-related disorders, all women with breast cancer should be routinely screened using appropriate psychological tools. Thus, processes to treat women who have elevated psychological distress could be promoted to improve quality cancer care.

#### 85 Poster Quality of life, psychological distress and perception of recurrence risk in women undergoing conservative breast surgery and sentinel-node biopsy versus women undergoing routine axillary dissection

F. Didier<sup>1</sup>, A. Maldifassi<sup>1</sup>, D. Radice<sup>2</sup>, G. Gatti<sup>3</sup>, A. Luini<sup>3</sup>, N. Rotmensz<sup>2</sup>, B. Santillo<sup>2</sup>, V. Galimberti<sup>3</sup>. <sup>1</sup>European Institute of Oncology, Psycho-Oncology Unit, Milan, Italy; <sup>2</sup>European Institute of Oncology, Division of Epidemiology and Biostatistics, Milan, Italy; <sup>3</sup>European Institute of Oncology, Department of Breast Surgery, Milan, Italy

**Background:** In a prospective longitudinal study we assessed the quality of life and the psychological distress of early breast cancer patients who

underwent a quadrantectomy and a sentinel node biopsy (SLNB) with or without a subsequent axillary lymph node dissection (ALND) in a short and long-term follow-up.

**Materials and Methods:** Quality of life, psychological distress and coping were assessed: one day before surgery, (baseline) then 3, 6, 9, 12 and 18 months after surgery. Quality of life was assessed with the Functional Assessment of Cancer Therapy associated with the Breast module (FACT-B). Psychological distress was assessed using the Hospital Anxiety and Depression Scale and coping to cancer using the Mental Adjustment to Cancer. Subjective perception of being ill related to the type of surgery was assessed with a specific module, in a small sample at 3 months.

**Results:** Between November 2005 and February 2007, 172 and 62 patients underwent respectively sentinel lymph node biopsy and axillary dissection. The type of surgery did not seem to affect global quality of life at median and long-term but at short-term follow-up; patients recovered sooner after sentinel lymph node biopsy. Patients with axillary dissection experienced significantly poorer quality of life systematically at 3 months after surgery. ALND patients had significantly lower scores than SLNB at 3 months ( $P = 0.006$ ) and a significantly quicker decline ( $P < 0.001$ ). The emotional well-being was always lower for the axillary dissection group, at 3 months. ALND patients had significant ( $P = 0.03$ ) lower scores compared to SLNB patients.

**Conclusions:** Patients who underwent breast conservative surgery with ALND or only SLNB experience overall high levels of QOL. Level of anxiety was high before surgery in both groups then decreased. We can state that patients in both groups need attention and anxiety medication before surgery. Women should be well-informed about the benefits of SLNB over ALND concerning QOL and post-surgery side effects in a short-term follow-up. Women in the ALND group are more vulnerable at a physical and emotional level and need more attention from the post-surgery nursing and breast surgeon team.

#### 86 Poster Oncoplastic surgery but not objectively measured symmetry after breast conserving therapy improves quality of life in breast cancer patients

R. Exner<sup>1</sup>, W. Krois<sup>1</sup>, O. Riedl<sup>1</sup>, H. Trischer<sup>1</sup>, M. Mittlboeck<sup>1</sup>, T. Wild<sup>1</sup>, R. Jakesz<sup>1</sup>, M. Gnani<sup>1</sup>. <sup>1</sup>AKH Wien, Allgemeinchirurgie, Wien, Austria

**Background:** After breast conserving therapy (BCT) patients often suffer from pronounced breast asymmetry. The effect on quality of life and sexual function is not well understood. The aim of this study was to investigate the relation between breast symmetry and quality of life in patients after unilateral breast cancer surgery undergoing BCT.

**Materials and Methods:** Randomly assigned patients from the surgical ward at different time points after surgery were included in this study. Breast symmetry was objectively measured with a new software (breast analyzing tool = BAT) and correlated with standardized quality of life questionnaires (body image scale = BIS; and the EORTC QLQ-BR23) using the Pearson Correlation Test. More over a sexual function score was created with a non validated questionnaire and correlated with symmetry. Multivariate analyses were used to investigate the relevance of different factors including age, tumor size, oncoplastic surgery and others for quality of life and symmetry.

**Results:** 101 patients were included in the study. Symmetry did not correlate with patients' quality of life or sexual function score. Multivariate analyses demonstrated that age ( $p = 0.03$ ) and tumor size ( $p = 0.01$ ) influenced objective measured breast symmetry while only the use of oncoplastic surgery ( $p = 0.02$ ) and age did influence patients' quality of life.

**Conclusions:** Symmetry of both breasts seems not to play an important role for quality of life in our patients. However, improving the breast shape itself by oncoplastic surgery, may be an important factor for patients' body image and quality of life after BCT.

#### 87 Poster Biopsychosocial assessment in breast oncology surgical pathology

M. Olivares<sup>1</sup>, M. Martin<sup>2</sup>, J. Roman<sup>1</sup>, A. Moreno<sup>1</sup>. <sup>1</sup>Hospital Clinico San Carlos, Gynaecology and Obstetrics, Madrid, Spain; <sup>2</sup>National University of Distance Education, Basic Psychology II, Madrid, Spain

**Introduction:** The investigation is part of the area of Health Psychology.

**Aims:** normative data of quality of life, anxiety/depression, body image and satisfaction. Check the various surgeries lead to differences in these variables. Check processing, radical/conservative, is different from the prophylactic/repairer in the variables studied. Compare the values pre-and post-surgical women with prophylactic and restorative surgery.

**Sample:** 438 patients diagnosed with breast cancer or genetic mutation carriers (BRCA1/2) in surgical treatment.

**Procedure:** Instruments: HADS, QLQ-C30, QLQ-BR23, BIS, PATSAT.

**Statistical analysis:** Descriptive analysis, "t" Student peer groups for independent and related samples, and analysis of variance of one factor.

**Results and Conclusion:** Surgery: radical (CR) (40.5%), conservative (CC) (47%), prophylactic (CP) (5%) and restorative (CRE) (7.4%). In the whole group, anxiety and depression are high. The overall quality of life is average, the symptoms in breast/arm and sexual activity is low. The satisfaction with medical care is excellent, with good nursing and the institution is adequate.

There are differences between the four types of surgery: body image is worse in CR versus CC and CRE. Anxiety is higher in CR versus CC, and CP and CRE versus CC. CRE has better overall quality of life than CC and CP. CP refers more pain than CC, CR and CRE. CP refers more fatigue and more symptoms in breast/arm CC and CR. The symptoms of the arm is lower in patients with CC compared with CR and CRE.

Regarding the differences between CR/CC against the CRE/CP: CRE/CP are younger, more anxiety and satisfaction with medical care, worse body image and quality of life (fatigue, pain, economy, breast/arm) after surgery, and more pre-surgical problems scales and social role. CR/DC have worse quality of life values (role and social) and CRE/CP have more pain and abnormal breast/arm. The functioning and sexual enjoyment is better in CRE/CP versus CC/CR.

The data help identify groups at risk, and implement treatment.

Wednesday, 24 March 2010

18:15–19:15

## POSTER SESSION

### Nursing

88

Poster

#### Decision making styles of older women with breast cancer

I. Kadmon<sup>1</sup>, P. Pierce<sup>2</sup>. <sup>1</sup>Hadassah Medical Organization, Nursing Division, Jerusalem, Israel; <sup>2</sup>University of Michigan, Nursing, Ann Arbor, USA

Medical decision-making in breast cancer care has been the paradigm of patient participation for about two decades. During these years, much research has been done to examine the experience of women's decision-making in breast cancer care. In many of these studies, age has been shown to be an influencing factor in shaping both women's preferences, values, decision style and participation in treatment decision-making. Younger women tend to prefer a more collaborative, deliberative style of decision-making, opposed to older women who showed a more passive, dependent and deferring style of decision-making when faced with such a situation.

This study examined the decision-making styles of older Israeli women with breast cancer. A sample of women attending breast screening mammography was asked how they would go about making a treatment decision if they were diagnosed with early stage breast cancer. Fifty three women over 65 years of age attending a routine screening mammography were given two questionnaires. One is a simple demographic data questionnaire and the other is the MADS (Michigan Assessment of Decision Style, as developed by Pierce, 1996) translated to Hebrew. The MADS is a valid 16-item questionnaire assessing decision-making styles characterized by four factors including: Avoidance, Deferring, Information seeking and Deliberation.

The Deliberation and Deferring factors had the highest mean scores (4.49 and, at 2.01 4.02) followed closely by Information-Seeking (M = 3.86). Avoidance was much lower. Correlations among the sub-scales indicate a significant, positive correlation between Deliberation and Information-Seeking and a significant negative correlation between Deliberation and Deferring Age, family history of breast cancer, and having a current mammography were not significantly associated with responses on the MADS factors. These results will be discussed in relation to the decision support we provide older women diagnosed with breast cancer and the nursing role involved in tailoring these interventions, as well as sensitivity to cultural differences.

89

Poster

#### Fast-track surgery and nursing care

H. Williams<sup>1</sup>, L. Nørby<sup>1</sup>, C. Pihlman<sup>1</sup>. <sup>1</sup>Copenhagen University Hospital, Department of Breast Surgery, Copenhagen, Denmark

**Background:** At Rigshospitalet, the largest university hospital in Denmark, the department for Breast Surgery has reduced the admission time after surgery from 3.6 days to 1.2 days.

The patients are discharged after surgery according to a set of discharge criteria developed as a means to secure quality of care. The patient is in touch with a contact nurse no less than 2 times between discharge and the final result of the operation.

**Material and Methods:** The department set out to introduce fast-track surgery for breast cancer patients in November 2008. Previous findings show that the time between discharge and the final consultation with the surgeon are perceived as particularly difficult for the patients; not knowing what to expect from the future and not knowing which adjuvant treatment is recommended. The department therefore set out to design a nursing care system, where patient care was not compromised with the introduction of fast-track surgery. The main feature of the nursing care system is a nurse-led outpatient department where the aim is to provide emotional and psychosocial support and give the patient an opportunity to ask questions and air concerns regarding their illness and the future. Furthermore, it gives the nurse a chance to check the wound and to secure adequate pain treatment. The nurse can decide whether the patients need more visits to the outpatient department, and it is also up to the nurse to refer the patient to a surgeon, if she finds it necessary.

The nurse-led outpatient department is in contact with the patient 2–5 and 7–9 days after discharge. The emphasis is on:

- Ensuring that the patient has understood information given before and after discharge
- Answering the patient's questions
- Providing emotional support
- Ensuring that the patient gets proper support at home
- The nurse also talks about the following: body image, prostheses, wound management, pain management, fatigue, sexuality etc.

**Results:** Patient satisfaction was measured before and after the initiation of fast-track surgery. This showed that the overall satisfaction amongst patients was higher after fast-track surgery implementation. Patient satisfaction is to be measured again in January 2010.

**Conclusion:** Fast-track surgery can be implemented without compromising the quality of care. It is possible to set up a system in an outpatient setting, ensuring nursing care of a high standard while taking into consideration the needs of the patient.

90

Poster

#### Patient satisfaction with a breast prosthesis service

B. Ip<sup>1</sup>, M. Berry<sup>1</sup>, M. Hennessey<sup>1</sup>, A.J. Jones<sup>1</sup>, G. Sheridan<sup>1</sup>, F.J. Hoar<sup>1</sup>. <sup>1</sup>City Hospital, Breast Unit, Birmingham, United Kingdom

**Background:** The majority of women undergoing mastectomy without breast reconstruction will be fitted with an external breast prosthesis. Breast Cancer Care have produced standards of care for prosthesis fitting services. A patient survey was undertaken to evaluate our service.

**Methods:** Women undergoing mastectomy between January 2007 & May 2009 were sent a postal questionnaire. Women who had bilateral mastectomies or who were receiving palliative care were excluded. The questions related to the service received were based on the published standards of care. In addition, women were asked to rate how well the prosthesis matched the natural breast in terms of size, shape, feel/texture and skin colour match using a categorical rating scale of 1 (poor) to 10 (excellent).

**Results:** 121 of 174 questionnaires were returned (response rate 69.5%). Six patients were excluded as they had declined a prosthesis or had bilateral mastectomies, leaving 115 replies for evaluation. The median age was 63 years (range 31–90, IQR 54–70). Most women were white (71%) with 15% asian, 12% black and 2% of other ethnic background.

87% women were provided with a temporary prosthesis prior to being discharged after mastectomy. Nearly all women (96.5%) were satisfied with the comfort & privacy of the fitting room and were provided with advice on prosthesis care (95.7%). Fewer women (70.4%) recalled receiving information on bras. Most women (74.6%) wear their prosthesis on a daily basis and there was no difference by patient age.

Most women were satisfied that the prosthesis matched the other breast well in terms of size, shape and feel (median scores 8, 9 & 8 respectively). The median score for colour match was lowest at 7. The poorest colour match reported was in black women. However women with a poor colour match generally did not report this was an area of great concern but there was wide variability.

**Conclusions:** The results show high satisfaction with the service. There needs to be greater attention paid to the needs of black women and to improve the rates of temporary prosthesis provision.