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[1], A. Fancellu[2], M.I. Sotgiu[3], M. Contu[3], M.G. Alicicco[3], A.S. Cuccu[3], A. Contu[3]. *[1]Azienda ASL n. 1, Dept of Oncology, Sassari, Italy; [2]Institute of Clinica Chirurgica University, Dept of Surgery, Sassari, Italy; [3]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[1], A. Maldifassi[1], D. Radice[2], G. Gatti[3], A. Luini[3], N. Rotmensz[2], B. Santillo[2], V. Galimberti[3]. *[1]European Institute of Oncology, Psycho-Oncology Unit, Milan, Italy; [2]European Institute of Oncology, Division of Epidemiology and Biostatistics, Milan, Italy; [3]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[1], W. Krois[1], O. Riedl[1], H. Trischer[1], M. Mittlboeck[1], T. Wild[1], R. Jakez[1], M. Gnant[1]. *[1]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 oncopolastic 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[1], M. Martin[2], J. Roman[1], A. Moreno[1]. *[1]Hospital Clinico San Carlos, Gynaecology and Obstetrics, Mardrid, Spain; [2]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.