

associated micro invasive component or with an invasive carcinoma of small size, however without any schedule of postoperative radiotherapy.

3. when an invasive carcinoma is present; the usual treatment according to the recommendations of our institute is proposed. In this case the contralateral prophylactic mastectomy as described above is performed the same day than the subsequent reconstruction of the ipsilateral breast.

We report here the preliminary results of our prospective registration in progress in Institut Curie.

The multidisciplinary management of patients with BRCA1 and BRCA2 mutations is particularly of great importance, requiring a specialised trained medical team. It must be particularly underlined that there is an increasing demand, concerning well-informed patients, therefore the given information and its traceability, as always in surgery consultation.

107

Poster

### Breast cancer surgery in day case setting: A systematic review

C. Frottscher<sup>1</sup>, M. Hebl<sup>1</sup>, A. Kessels<sup>2</sup>, G. Beets<sup>1</sup>, M.F. Von Meyenfeldt<sup>1</sup>.

<sup>1</sup>University Hospital of Maastricht, Surgery, Maastricht, The Netherlands;

<sup>2</sup>University hospital of Maastricht, KEMTA, Maastricht, The Netherlands

**Introduction:** Is there enough evidence in the literature to demonstrate that day case surgery (DCS) for breast cancer is feasible, safe and well accepted by all patients and in all types of surgical procedures?

**Brief description:** A systematic literature search in five scientific databases (Medline, Embase, CINAHL, Psycinfo and Cochrane library) and in the reference lists of selected papers was performed for the terms breast, surgery, neoplasm, cancer, ambulatory, day case, outpatient, day care, day surgery, one day and early discharge. No restrictions were used concerning study design, age, gender or stage of breast cancer. Studies were selected if describing breast conserving surgery (BCS) with sentinel lymph node biopsy (SLNB), axillary lymph node dissection (ALND) with or without BCS, simple mastectomy (SM) or modified radical mastectomy (MRM) under general anaesthesia and in day case setting. The outcome of the study should describe one of the following aspects: the success rate of DCS, reasons for unplanned admissions, complication rate, patient satisfaction or costs.

**Summary:** No randomised clinical trials (RCT) on the subject were found. The included studies were mainly observational studies without a proper control group. Sixteen papers describing 18 studies were included. The percentage of patients treated with DCS in these studies ranges from 4 to 100%. This is mainly caused by differences in patient recruitment, surgical intervention performed and exclusion criteria used for DCS. Overall, no significantly increased risk of surgery in day case setting is seen. The major cause of (unplanned) admission is side effects from anaesthesia (postoperative nausea and vomiting). The MRM is less frequently performed in DCS than BCS with and without ALND. Despite the fact that authors report that patient and informal carers are satisfied and accept DCS well, no validated questionnaire was used to assess patients' acceptance or satisfaction. The range of hospital cost reduction varied between 50 and 85%.

**Conclusion:** This literature review describes that performing DCS in breast cancer is not supported by evidence from RCT's, but seems feasible in approximately 50–70% of the population depending on the distribution of the type of surgery performed, the hospital setting, health care system, and without an increase in surgery related complications. Similarly, patients' acceptance and satisfaction seems sufficient, but is not supported by evidence.

108

Poster

### Sentinel node biopsy after neoadjuvant chemotherapy in breast cancer

C. Ferraris, A. Conti, M. Gennaro, I. Grosso, R. Agresti, M. Zambetti, M. Greco. Istituto Nazionale Tumori, Breast Unit – General Surgery, Milano, Italy

**Background:** to evaluate the accuracy and feasibility of sentinel node biopsy technique in patients with operable clinically node negative breast cancer after neoadjuvant chemotherapy irrespective of the initial stage.

**Material and Methods:** the subject of this study was 45 consecutive patients affected by T2N1M0 core biopsied breast cancer, treated at Istituto Nazionale Tumori, Milano. Age ranged from 24 to 58 years. They underwent neoadjuvant taxanes-antracycline containing chemotherapy. Axillary mapping was performed in all patients using both lymphoscintigraphy with radioactive colloid and blue dye injection. After this a three-levels axillary dissection was performed after sentinel node biopsy at the time of definitive surgery. Breast conserving treatment was allowed in 21 patients; they remaining received total mastectomy.

**Results:** The detection rate of sentinel node was 2/45 (95.5%) with a full concordance between the two methods (blue dye and hot). Nodal

involvement was found in 14 (31%) patients in agreement with sentinel node status. The sentinel node was the only positive in 5 (11%) of these patients. In this series 20 patients was node negative and false negative rate was 4/45 (9%).

**Conclusions:** neoadjuvant chemotherapy downstages axillary lymph nodes and sentinel node biopsy seems to be as accurate and feasible to stage axilla as in case of sentinel node biopsy performed during primary surgery.

109

Poster

### Lymphovascular invasion and local recurrence

P. Prathap, R. Harland. Royal Albert Edward Infirmary, General Surgery, Wigan, United Kingdom

**Introduction:** Lymphovascular invasion (LVI) is associated with an increased risk of local recurrence after breast conservation and mastectomy. We wished to study whether management of the primary tumour should be influenced by the presence of LVI.

**Material and Methods:** 347 patients treated under the care of a single surgeon between 1<sup>st</sup> Jan 1992 and 31<sup>st</sup> Dec 1995 were followed for a median of 68 months after surgery for breast cancer. Twenty three had suffered local relapse after mastectomy (18) or conservation (5). All patients had clear margins at primary surgery. LVI was present in the primary tumour in 4/23 (17.3%) of those who relapsed, compared with 42/324 of those who did not ( $\chi^2 = 0.37$ ;  $p = 0.55$ , no significant correlation). LVI was included with tumour grade, tumour size and extent of nodal involvement in multivariate logistic regression analysis with local recurrence as the dependent variable. Tumour size greater than 3 cms (Odds ratio 2.67,  $p = 0.06$ ) and involvement of 4 or more nodes (odds ratio 10.1,  $p < 0.0001$ ) were the only variables associated with local recurrence. LVI and tumour grade were not associated independently with local recurrence.

**Conclusion:** The presence of LVI should not determine the management of primary breast cancer.

110

Poster

### Endoscopic subcutaneous mastectomy and immediate reconstruction for breast cancer

J.P. Jeong, W.G. Bae, E.K. Lee, Y.L. Park. Sungkyunkwan University School of Medicine, Surgery, Seoul, Korea

**Background:** A subcutaneous mastectomy has been proven to be oncologically safe for early breast cancer. Although a subcutaneous mastectomy and reconstruction are well established, most incisions are made directly on the breast. To improve the cosmetic outcome, an endoscopic subcutaneous mastectomy and immediate reconstruction was undertaken, which can be performed through minimal axillary and periareolar semicircular incisions.

**Materials and Methods:** Between October 2002 and September 2005, 31 patients with early breast cancer, whose tumors were less than 4 cm in size and more than 2 cm apart from the nipple-areolar complex, and who were clinically node negative without invasion to skin and pectoralis muscle, underwent endoscopic mastectomies with immediate reconstruction employing saline bag implants. Firstly, an endoscopic dye-guided sentinel node biopsy was performed through a low transverse axillary incision lateral to the pectoralis major. A subpectoral pocket was gently created under the view of endoscopic monitor by Vein Harvest. A periareolar semicircular incision was made to create the skin flap using Visiport and PowerStar Scissors. Frozen section biopsies were performed to rule out tumor invasion to the resection margin. After resection of the entire breast tissue, a saline bag prosthesis was inserted. The patients and tumor characteristics, operation time, amounts of bleeding, and cosmetic results were evaluated.

**Results:** The mean patient age was 45 years (25–64). The mean tumor size was 2.2 cm., ranging from 0.5 to 3.5 cm. The average operation time was 119 minutes (80–150). The mean amount of operative bleeding was 226ml (60–390ml). There was two cases of transient necrosis of the nipple-areolar complex. An early implant removal was performed in one patient due to a suspected microperforation. Excellent or good cosmetic results were obtained in 30 patients (96.8%).

**Conclusion:** An endoscopic subcutaneous mastectomy with immediate reconstruction, is a new technique that can minimize the direct operation scar on the breast skin following a classic operation. In properly selected cases, our results show maximized cosmetic satisfaction of breast cancer patients, so offers a promised alternative to a classic subcutaneous mastectomy with immediate reconstruction.