682 POSTER

## LOCO-REGIONAL RECURRENCES IN A RANDOMIZED TRIAL OF BREAST CANCER TNM STAGE II—PROGNOSTIC FACTORS

The South Sweden Breast Cancer Trial, L. Tennvall-Nittby, I. Tengrup Departments of Oncology and Surgery, University Hospital, Malmö, Sweden Loco-regional recurrence (LR) was studied in 1153 patients with breast cancer all operated with modified mastectomy and randomized into 6 adjuvant treatment groups thus: Premenopausal patients RT and/or Cyklophosphamide; post-menopausal patients RT and/or Tamoxifen. Median observation time 12 years. Recurrence occurred in a total of 460 patients, 128 of whom had LR  $\pm$  distant metastases. The distribution between T1/T2 tumours did not differ in patients with LR compared with the total material. However, premenopausal patients without postoperative RT, with LR had more T2 tumours (83% vs 61%). Patients with LR had significantly more N+ tumours initially compared with the patients in the total study. However, premenopausal patients without postoperative RT did not differ from the patients in the whole study regarding the distribution between N0 and N+.

Premenopausal patients in the total study had significantly more tumours of ductal carcinoma of comedo type compared with the postmenopausal patients (48% vs 35%). Premenopausal patients without postoperative RT with LR had more often tumours of comedo type than those with postoperative RT (61% vs 41%). Postmenopausal patients with or without postoperative RT with LR had significantly more tumours of comedo type than those in the total study (57% vs 35%). Patients with first local recurrence and without progressive disease had a high proportion of lobular tumours (33%), compared with the total study (9%) and all LR (7%).

Unfavourable prognostic factors for developing LR were found in this study to be positive lymph nodes and in postmenopausal patients tumours of comedo type.

POSTER DIAGNOSTIC VALUE OF IMPROVED AGNOR STAINING IN

# **BREAST TUMOR CYTOLOGY**

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The AgNOR technique was applied to cytologic preparations obtained from surgical specimens and fine needle aspiration (FNA) biopsies to evaluate its usefulness in diagnosis of breast lesions. To increase the resolution of AgNORs, some methodological improvements (including hypotonic treatment) were introduced in the processing of surgical and FNA specimens from 60 patients with benign and malignant breast tumors. The nucleoli number, size and shape, and AgNOR pattern (Ag-NOR number per cell, shape and distribution of AgNOR clusters) were examined. The method appeared to be helpful in distinguishing both between benign and malignant disease, and low and high grade malignancy; its advantage is practical applicability in diagnostic FNA breast cytology.

684 PUBLICATION

### IS POSTOPERATIVE MAMMOGRAPHY PRIOR TO DEFINITIVE BREAST IRRADIATION THERAPY USEFUL?

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Following breast conserving surgery, the presence of abnormalities in postoperative mammography may influence the choice of subsequent treatment. We evaluated 120 pre- and post-operative mammograms of patients who underwent conservative surgery for breast cancer. The median interval between the pre and post-surgical mammograms was 98 days (range, 18-412 days). Clinical records of all patients were reviewed retrospectively. The site of surgery, postoperative complications, histologic characteristics, the dimensions of the resected tissues and the findings on physical examination of the breast before and after surgery were recorded. The pre- and postoperative mammographic findings are analysed and the results compared with the literature.

The purpose of this study was to evaluate the usefulness of postoperative mammography in determining the presence of residual tumor or other abnormalities before starting radiation therapy.

PUBLICATION

#### DIAGNOSIS OF LOCAL RECURRENCE AFTER CONSERVATIVE TREATMENT OF BREAST CANCER

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Institute of Oncology Bucharest, Department of Surgery, Romania Changes in the breast structure after conservative treatment of breast cancer make difficult the follow-up of these patients. The main problem is to differentiate morphological complications (postoperative scar, nodular sclerosis, breast edema) from local recurrence.

64 patients with early breast cancer treated by limited surgery and radiotherapy were followed-up for a medium time of 36 months by: clinical examination, mammography, echography, evaluation of CA 15-3 level and when needed fine needle aspiration and surgical biopsy. The analvsis of these diagnostic tools showed that clinical examination proved to be useful especially repeated at short intervals. Mammography alone had a low sensibility and a low positive predictive value, association of echography and fine needle aspiration improved the results and CA 15-3 evaluation had a great sensitivity and specificity. In 9.3% cases diagnosis was possible only by surgical biopsy. 4 patients (6.2%) developed local recurrence in the treated breast within 3 years of initial treatment.

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#### **BCL2 EXPRESSION IN NODE-NEGATIVE BREAST** CARCINOMA: A STUDY ON A SERIES OF 190 CASES WITH LONG-TERM FOLLOW-UP

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<sup>5</sup>Nuffield Department of Pathology, John Radcliffe Hospital, Oxford, U.K. Background: Bcl2 expression has been demonstrated in breast carcinomas and it has been suggested that Bcl2 expression may be prognostically relevant both in node-negative and node positive tumours. Aim: Evaluate the prognostic role of Bcl2 in a series of node negative breast carcinomas (NNBC) and compare it with other prognostic markers [tumor size, grading, estrogen receptor (ER), p53 expression]. Material & Methods: The study included a consecutive series of 190 NNBC patients underwent surgery with complete axillary dissection. Eighty cases were treated according to the Milan QUART protocol; 110 were treated with mastectomy. Adjuvant chemotherapy was given to 23 patients, hormonotherapy to 24. Median follow-up (range) was 60 mos (9-130). Paraffin sections of all tumors were available for immunostaining for Bcl2, ER, and p53. All cases with 20% or more of Bcl2 reactive cells were considered positive. Results: 126 cases were Bcl2 positive. Bcl2 expression was associated with ER expression, lack of p53 expression and low grade (P < 0.00001, 0.00001, 0.00001 respectively). No association was seen between Bcl2 expression and relapse free and overall survival (RFS, OS). Discussion: The present results are at variance with similar studies on NNBC showing a significant albeit weak association between Bcl2 and RFS and OS.

#### **PUBLICATION** OESTROGEN RECEPTOR AND KI67 STATUS IN BREAST CARCINOMAS FOLLOWING PRIMARY CHEMOENDOCRINE THERAPY

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There has been a paucity of data looking at the effect of chemotherapy on proliferation indices in human breast cancer. We have assessed proliferation index in 155 patients randomised to receive either primary MM (Mitoxantrone, Methotrexate) + Tamoxifen (Tam) prior to surgery (PMT; n = 73, med age 56 yrs) or surgery followed by adjuvant MM + Tam (ADJ; n = 82, med age 55 yrs). Paraffin embedded sections from the surgical excision specimens of both groups were stained immunohistochemically with the MIB-1 monoclonal antibody to Ki67 and a percentage score of positively staining malignant cells obtained. Oestrogen receptor (ER) status was determined by enzyme immunoassay (EIA). ER was not assessable in 9 pts in the PMT arm. Proliferation was significantly lower in the PMT arm (med MIB-1 score 1.7%, range 0-84.5%) compared with the ADJ arm (med MIB-1 score 9.9%, range 0-80%) (P=0.003). In ER positive tumours MIB-1 was significantly