studies should explore the effect of inpatient stay for breast surgery on the provision of adjuvant treatments, particularly using prospective studies to investigate any impact on cosmesis.

5130   POSTER
Long Term Results and Prognostic Factors in Patients With Unicentric and Multicentric Breast Cancer

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Background: Among many oncologists the opinion exists, that multicentric breast cancer (MBC) shows greater metastatic dynamics and has worse prognosis comparing to unicentric breast cancer (UBC) in the same TNM. Some researchers think that proper evaluation of pT in MBC should be based on combined diameters not on the largest diameter of tumour.
The aim of the work is estimation of the treatment results with regard of multicentricity in breast cancer.
Material and Methods: The retrospective analysis included 954 consecutive women with breast cancer in stage IA-IIIC after radical mastectomy treated between 1995–1998 at the Cancer Center in Warsaw. Adjuvant chemo- or hormone therapy received 449 (47%) and 262 (27%) of patients respectively. Two hundred forty three (26%) of patients had not been given systemic treatment. Postsurgical irradiation was performed only in 135−14% of patients. Cox's regression model was used to analyse the prognostic factors having influence on disease-free survival (DFS) and overall survival (OS). Median of follow-up was 134 months.
Results: MBC was diagnosed after mastectomy in 104 (10.9%) of patients. There were no significant differences in characteristics between UBC and MBC groups according to age, stage, pT, pN, type and grade of histology and methods of adjuvant treatment. The 10-year actuarial DFS and OS for patients with UBC and MBC were 51%, 62% and 58%, 72% respectively (Log Rank p > 0.05). Locoregional recurrence rates were higher in UBC than in MBC: 78/850 (9.2%) vs 7/104 (6.7%) of patients p = 0.03. There were no statistical significant differences in frequencies of lymph nodes metastases among groups with UBC and MBC according to pT − measured as greatest diameter. In multivariate logistic regression analyses the following classical prognostic factors had independent influence on DFS and OS: pN, pT, G, and vascular invasion − p < 0.01. Multicentricity of breast cancer did not appeared significant prognostic factor neither for DFS and OS − p > 0.1.
Conclusions: From present retrospective analysis results that MBC does not deteriorate of prognosis compare to UBC and the largest rather than combined diameters of multicentric lesions should be used to establish pT what is recommended and concordant with TNM system. However, multicentricity breast cancer should be considered at postsurgical radiotherapy planning because it can have influence on improvement of locoregional control.

5131   POSTER
Sentinel Node Biopsy Following a Preoperative Diagnosis of Ductal Carcinoma in Situ (DCIS) in the Management of Screen Detected Cancer

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Background: Sentinel node biopsy has an essential role in the prognostication of invasive breast cancer. The procedure's role following a preoperative diagnosis of in situ breast cancer (DCIS) is controversial. Although a proportion of preoperatively diagnosed DCIS is subsequently determined to be invasive, these tumours tend to be small and the incidence of metastatic disease in this setting is vanishingly small.
Aims: The aims of this study were to describe the incidence of invasive breast carcinoma following therapeutic surgery for screen detected DCIS and to identify factors that may predict areas of invasion, thus facilitating the performance of a sentinel node procedure at initial surgery. The incidence of metastatic disease was also recorded.
Methods: All patients diagnosed with DCIS on core biopsy pre-operatively following screening mammogram from January 2002 to August 2010 were identified from a prospectively maintained national breast screening database. The dataset was interrogated for patient demographics, and tumour radiological and histopathological features.
Results: In total there were 783 patients diagnosed with DCIS during the study period, 74% (n = 576) of which had an axillary procedure Overall

there was a reported incidence of subsequent invasion on pathological assessment of surgical specimens of 25.3% (n = 198). On logistic regression, features that were associated with an increased incidence of subsequent invasion were large mammographic size, (p < 0.003), palpable mass, (p < 0.05), and age >55, (p < 0.02). The overall rate of positive axillary lymph nodes was 4.7%, (n = 37). Multivariate analysis of features found to be statistically significant for nodal disease in this series were clinically palpable mass (p < 0.04) and increasing patient age (p < 0.03).
Conclusions: Sentinel lymph node assessment is not indicated in all cases of screen detected DCIS. There are preoperative characteristics that are predictive of invasion at therapeutic resection, however the low rate of nodal disease in this series would suggest that sentinel node could be avoided even with operative confirmation of invasion.

5132   POSTER
The Prognostic Value of Tumour-stroma Ratio in Triple Negative Breast Cancer

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Background: Triple-negative cancer constitutes one of the most challenging groups of breast cancer given its aggressive clinical behaviour, poor outcome and lack of targeted therapy. Until now, profiling techniques have not been able to distinguish between patients with good and poor outcome. Recent studies suggested an important role for stroma in tumour growth and progression. In colorectal-, oesophageal- and breast cancer, the tumour-stroma ratio was found to be of prognostic value.
Objective: To evaluate the prognostic value of the tumour-stroma ratio in triple-negative breast cancer.
Methods: During the period January 2004–2008, 124 consecutive triple negative breast cancer patients treated in our hospital were retrospective evaluated. Routine Haematoxylin-Eosin (H&E) stained histological sections were evaluated by two investigators (kappa 0.735) for stroma percentage, growth pattern (pushing margin), necrosis and amount of lymphocytic infiltrate. Patients with less than 50% stroma were classified as stroma-low and patients with ⩾ 50% stroma were classified as stroma-high.
Results: Of 124 triple-negative breast cancer patients, 50 (40%) had a stroma-high and 74 (60%) had a stroma-low tumour. Survival analysis revealed a 5 years relapse free period (RFP) of 85% in the stroma-low and 45% in the stroma-high group. Overall survival (OS) was 89% for stroma-low and 65% in the patients with a stroma-high tumour. Both RFP and OS were significantly worse in patients with stroma-high tumours compared to stroma-low. In a multivariate cox-regression analysis, tumour stroma remained an independent prognostic variable for RFP (HR 2.39; 95% CI 1.07–5.29; p = 0.033) and OS (HR 3.00; 95% CI 1.08–8.32; 0.034) when corrected for other clinical-pathological variables.
Conclusion: Tumour-stroma ratio is a strong independent prognostic variable in triple-negative breast cancer. It is easy to determine, reproducible (kappa 0.735) and can be easily incorporated into routine histological examination. This parameter optimizes risk stratification and could be target for future therapies.

5133   POSTER
Segmental Resection in the Early Breast Cancer Treatment

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Background: Conservative surgery is accepted as a treatment of choice for the vast majority of patients with early breast cancer. Standard management of axilla in invasive breast carcinoma is axillary dissection, which provides both treatment and information on nodal status. Nonetheless, this procedure is responsible for functional sequelae, mainly arm edema. At present, the percentage of involved nodes is decreasing because diagnosis of breast cancer is made earlier, and the benefit of this surgery is in question.
Purpose: The main aim is to study efficacy of segmental resection without axillary dissection in patients with early breast cancer.
Patients and Methods: Between January 1988 and December 2008 101 patients with early breast cancer from Ulyanovsk Oncology Center were assigned to segmental resection without axillary dissection. This group included the patients, who refused to receive radical mastectomy or breast conservative surgery with axillary dissection, patients with hard intercurrent

diseases that did not permit to perform surgery under general anesthesia. Patients with no clinically involved axillary nodes, and nonmetastatic (N0M0) disease were eligible for this trial. The control group consisted of 141 patients received segmental resection with axillary dissection. Upward of 65% women were more then 60 years old, the average age of the group was 68.6±2.1 years. Most of the patients had primary breast tumours less than 3 cm and median size of tumour was 2.4±0.2 cm. As most of the patients were elderly persons, 64 (63.4%) of them suffered from different intercurrent diseases (uncontrolled hypertension, unstable angina, serious cardiac arrhythmia, chronic renal failure, cirrhosis, serious asthma and diabetes).

Results: Surgery was performed in 25 (24.7%) patients, surgery plus radiotherapy − in 26 (25.7%) patients, surgery plus chemo/hormonal therapy − in 23 (22.8%) patients, surgery plus radiotherapy and chemo/hormonal therapy − in 23 (22.8%) patients. Surgery was performed under local anesthesia. In the study we found that overall 3 years survival was 89.9%, 5 years survival − 81.9%. There was no statistical difference of these rates in all studied groups. That's why we may consider, that overall survival does not depend on the method of treatment. The results of survival rates in the control group were nearly the same − 3 and 5 years survival were 93.2% and 85.2%, respectively. Three patients developed an axillary recurrence. Seven patients later developed distant metastases. During the follow-up 29 patients (28.7%) died, 7 of them − because of cancer progression, 13 − because of intercurrent diseases. The reason of death of 9 patients is still not known.

Conclusion: Segmental resection without axillary dissection may be performed in selected cases of early breast cancer and doesn't influence on long-term survival.

5134 POSTER

Are Mammograms Reliable in Determining True Ductal Carcinoma In-situ (DCIS) Size?

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Background: Ductal Carcinoma In-Situ (DCIS) is an increasingly common diagnosis due to the NHS Breast Screening Programmes. DCIS is usually impalpable, with excision margins often dictated by the extent of calcification identified on mammography. The aim of this study was to assess whether the mammographic size truly reflects the actual pathological size.

Materials and Methods: A retrospective case-note review study of all patients diagnosed with DCIS in a teaching hospital from 2007 to 2009 was carried out. Initial mammographic size was compared to final histological size. Size correlation was defined as within 10 mm (normal macroscopic clearance). DCIS type and grade were also recorded as were patient demographics.

Results: 100 patients' notes were reviewed. Mammographic size correlated with pathological size in 49 (49%). However in the remaining 51 patients, 27 were under estimated by mean 27 mm (330% of original mammographic size) whilst 24 were over estimated by mean 23 mm (56.5%). There is no DCIS type that predicted size correlation although; the greatest concordance between radiological and histological data was seen in the high grade group. The lowest concordance was seen with the intermediate grade group.

Conclusion: Mammograms do not appear to predict true size in half of the cases of DCIS reviewed. Under-estimating the size of the lesion may impact margin status and thus require further excision. Over-estimating the size may result in more extensive excision than necessary, resulting in a worse cosmetic outcome even mastectomy. Clinicians need to be aware of the limitations of using mammographic size alone to plan surgery and ensure that patients are appropriately counselled regarding this.

5135 POSTER

New Approaches Into Early-stage Breast Cancer Surgery in Older Patients

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Background: Axillary lymph node dissection has been considered to be a standard procedure due to better locoregional control and survival rates. However 48% of breast cancer patients are women aged 65 and older. And the question of performing axillary lymph node dissection in this group of patients is still controversial due to the lack of data, higher mortality rates from concomitant diseases and good response to endocrine therapy.

Materials and Methods: A retrospective study of 425 early breast cancer cases (stage T1 and T2, N0, M0) in women after 60 years old treated in the Ulyanovsk Regional Oncological Centre between July 1988 and December 2008 was conducted.

58.3% of patients underwent mastectomy + axillary lymph node dissection (group A), 21.8% − lumpectomy + axillary lymph node dissection (group B), 19.7% − lumpectomy only (group C). Most of them had 2 or more concomitant diseases.

Results: 5.2% of patients from the group C developed local recurrence: 1.1% − in the scar, 4.7% − in regional lymph nodes and ipsilateral breast. Distant metastases occurred in 7.1% of patients, mostly in lung and mediastinum lymph nodes. In Group B local recurrence occurred in 13.9% of patients: 7.5% − in the scar, 4.3% − in the ipsilateral breast, 2.1% − in axillary lymph nodes. Distant metastases were detected in 12.9% of patients. Disease progression was fixed in 11.2% of Group A patients, with local recurrence rate − 2.4%.

At the time of analysis (10/07/2010) 97 deaths (22.8%) in the study group were registered. Mortality structure was different in the studied groups, with the highest death rate from concomitant diseases in the group C.

A statistically significant increase in overall survival in group B than in group C (log rank test: $\chi^2 = 11,88353$, df = 2, p = 0.00263) was non-significant in comparison with those in group A. 3-year overall survival in groups A−C was 88.8±2.3, 89.4±3.4% and 79.6±4.9% respectively. Disease-free survival rates were 84.7±2.6%, 81.7±4.2% and 75.1±5.2% respectively in the three groups (log rank test: $\chi^2 = 5,578870$, df = 2, p = 0.05047).

Conclusions: Lumpectomy does not increase disease-related mortality and could be recommended for treatment of older patients with early-stage breast cancer.

Lumpectomy+axillary lymph node dissection does not significantly change overall and disease-free survival in comparison to radical mastectomy and can be preferred for surgical management of this group of patients.

5136 POSTER

Sentinel Node Biopsy Under Local Anesthesia in Patients With Breast Cancer − in Whom is It Indicated?

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The most important prognostic factor in breast cancer patients is the axillary nodal status. Preoperative axillary ultrasound with subsequent fine needle aspiration cytology (FNAC) in case of suspicious lymph nodes, is currently used to screen for axillary metastases. Before, we concluded that the percentage of false negative results of FNAC was very high. Therefore, in the present study we analyzed if certain patient or tumour factors cause an increased risk of false negative results of FNAC. In these patients, a sentinel node biopsy under local anesthesia might be indicated.

Retrospectively, we reviewed the data of 1151 breast cancer patients, that were evaluated and treated in our clinic between 2004 and 2009. Preoperative axillary ultrasound with subsequent FNAC in case of suspicious lymph nodes was performed in all patients. Pathological node status was used as the reference standard. The association between the incidence of axillary metastases and 11 clinical/pathological factors (age, side, histology, multifocality, size, grade, estrogen and progesterone receptor status, HER-2/neu, nuclear grade and radiologist) was analyzed by univariate and, when significant, by multivariate analysis. The association between these factors and the risk of false negative results of FNAC was analyzed as well.

427 of 1151 patients had metastatic disease on final histological analysis. Multivariate analysis identified 2 factors as independent predictors of axillary metastases: age (p < 0.01) and tumour size (p < 0.01). Likewise, multivariate analysis identified 3 factors as predictors for the risk of false negative results of FNAC: age (p < 0.01), tumour size (p < 0.01) and multifocality (p = 0.04).

Before, we concluded that sensitivity of FNAC was 24.4% (104/427). The lower the sensitivity [defined as true positives/(true positives + false negatives)], the higher the percentage of false negative results. Therefore, the possibility of a false negative result of FNAC increases, if the percentage of patients with axillary metastases increases. Hereby, we explain that age and tumour size are predictors of the risk of axillary metastases as well as predictors for the risk of a false negative result of FNAC.

Because of the increased risk of a false negative result of FNAC, we recommend a sentinel node biopsy under local anesthesia in patients with a large breast carcinoma or a multifocal tumour and in elderly patients.