demographic variables: 3.1. those who declared not any preference were significantly older ($p < 0.045$) and less educated ($p < 0.03$) in comparison to PO/IV group, 3.2. patients who preferred PO route of ACT were more experienced with adjuvant anticancer IV chemotherapy ($p = 0.001$) and more frequently subjected to locoregional adjuvant radiotherapy ($p = 0.02$) as well as employed in the full-time ($p < 0.025$) that those representing IV/NP group; 4) maritial status and duration of interval between the diagnosis of breast cancer and completing the questionnaire as well as current adjuvant endocrine therapy did not influence the patients' choice.

Conclusion: our results demonstrate a striking breast cancer patients preference for oral compared with IV ACT and indicate that some demographic and disease-related factors might influence patients' decision on this point.

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Locoregional recurrence after initial therapy for breast cancer

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Background: The ten-year incidence of locoregional recurrence (LRR) after treatment for breast cancer is about 13%. LRR has traditionally been regarded as predictor of subsequent distant metastasis. Clemons reported approximately 35% of LRR had simultaneous of antecedent distant metastasis. But in the case of being thought as LRR only, local management including surgery and radiotherapy have presented survival gain. we thought the case of operable LRR would show the better survival compared inoperable LRR. This study is designed to achieve survival rate, disease progress of patients have LRR only, and to compare the survival rates among operable group and inoperable.

Methods: We reviewed the records of all patients with LRR after initial treatment at Asan Medical Center between 1989 to 2003. They were classified LRR only group and simultaneous distant metastasis group. And again, LRR only group was divided as operable group and inoperable group. this data was analysed by SPSS 11.0

Result: Two hundred twenty-three patients who were diagnosed LRR were included in this study. (we excepted patients who didn't visit our hospital after diagnosis of LRR.) Among these patients, the number of LRR only patients was 152 and that of simultaneous distant metastasis group was 71. And 105 of LRR only was operable case. The 5-year survival rates from initial operation of LRR was 42.5%, but in LRR only group, that was 66.8% which was comparable for survival of stage III. the 5-year survival rates from initial operation of operable group and inoperable group had a surprising difference as 78.3% and 41.8%, that of operable group showed that of between stage II and stage III. About 38% (41/105) had a secondary failure during 29.6months that was mean follow up duration after reoperation for LRR. their mean interval between reoperation and secondary failure was 19.7months, this interval was shortter than initial disease free interval(24.5mo). 32patients (78%) of secondary failure group had distant metastasis finally.

Conclusion: Although many of their disease progression is going to distant metastasis, relatively good survival rate measured between stage II and stage III is expected in the operable LRR group. Thus we suggest active multimodality treatment for LRR is required.

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Local recurrence after breast conservation treatment for invasive central or retroareolar breast cancer

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Background: Although breast conservation with quadratectomy and radiation treatment has become a commonly used treatment for breast cancer, there are little data to support the use of quadratectomy for central or retroareolar breast cancers. In this study, we investigate the local and distant recurrence rates of patients with central or retroareolar breast cancers treated with quadratectomy compared with mastectomy.

Methods: Data of 45 patients were collected from breast cancer registers from Clinic for Oncology Nis between 1990–2004.

Results: The overall frequency of local recurrence was 4 of 45 (8.88%) in the entire group, 2 of 31 (6.45%) and 2 of 14 (14.28%) of patients who underwent mastectomy and lumpectomy, respectively ($P > 0.69$). Overall, 3 patients experienced a distant recurrence as a first event, with 2 patients (14.28%) in the quadratectomy group and 1 patient (3.22%) in the mastectomy group ($P > 0.5$). Median time to local recurrence of 4.7 years for the mastectomy patients and 2.9 years for quadratectomy patients. Of the patients with central tumors who underwent mastectomy none had developed local recurrences compared with those who had a lumpectomy, 1 of 9 (11.11%). For retroareolar tumors, the local recurrence rate was 1 of 15 (6.66%) for patients undergoing mastectomy and 2 of 11 (18.18%) for those undergoing quadratectomy ($P > 0.69$).

Conclusions: In this study there was no significant difference in local or distant failure rates of those patients with central or retroareolar tumors treated with mastectomy versus lumpectomy. We conclude lumpectomy to be a reasonable treatment option for selected patients with central or retroareolar breast cancers

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Breast cancer in young women (35 years or younger): features of disease presentation in a developing country

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Introduction: The aim of this study was to review patients aged 35 years or younger with operable breast cancer from 1999 to 2001: the characteristics of the disease, the first presentation, the management and the follow-up of this particular population.

Results: Breast cancer is the most common female malignany in the national cancer institute, cairo university. It represents about 38% of all new cancer cases. The median age at presentation is 47.2 y, almost one decade younger than in developed countries. This study includes all patients with operable breast cancer aged 35y or younger from 1999 to 2001. The total numer of this group of patients is 272 patients.

The mean age at presentation was 30.2 years, median was 32years (S.D. ±6.44) with a range of 23y to 35 y. Late presentation of most patients is a characteristic feature and the inflammatory type of breast cancer is relatively more frequent. Thus, in an NCI series [9], clinical T2 and T3 were found in the majority of cases, 57% of patients. The mean tumour size was 4.5 cm. The frequency of axillary lymph node metastases was 71%. The number of positive nodes was 1–3 in 23%, 4–10 in 22% and more than 10 in 17% of patients. The most common tumour was invasive duct carcinoma (87.4%). Pathologic grading showed a low incidence of grade I (3.4%). Grades II and III tumours were 71.0% and 25.6% respectively.

The profile of hormone receptors as determined by immunohistochemistry was positive for estrogen receptors (ER) in 43.9%, for progesterone receptors (PR) in 31.4% and for both receptors in 27.2% of cases.

Conclusion: This group of patients has a more aggressive disease. Hormone receptors status, and number of positive axillary lymph nodes were a major prognostic factor in the DFS and OS. We believe that this category of patients warrants a more special attention, amd a more tailored multidisciplinary management.

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Re-irradiation and hyperthermia for loco-regional recurrent breast cancer; its therapeutic effect and side effects

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Background: We retrospective analysed a cohort of 51 patients to evaluate the therapeutic effect and side effects of adjuvant re-irradiation and hyperthermia for loco-regional breast cancer recurrence in previously irradiated area, after excision or CR after chemotherapy.

Patients and Methods: All 51 patients, 50 female and 1 male (median age 51 years), were previously irradiated to a equivalency ≥50 Gy in 5 weeks. Previous radiotherapy consisted of local irradiation in 47%, loco-regional irradiation in 47% and only regional irradiation in 6%. 63% of recurrences were first recurrences, 25% were second ones and 12% had more than 2 recurrences before re-irradiation and hyperthermia were given. The majority received one or more lines of systemic therapy. At start of RT/HT there was no macroscopically detectable tumor. This was achieved by minor surgery in 49%, by major surgery in 47% and by chemotherapy in 4% of the patients. Time interval between first diagnosis and current recurrence was < 24 months in 12%, < 60 months in 55% and < 96 months in 75% of patients. RT/HT consisted of 20–40 Gy/3–5 weeks, twice a week, and 3–6 sessions of superficial hyperthermia with 434 Hz microwave antennas to a temperature of 42 °C during one hour. 13 patients received hormonal therapy during treatment. At time of treatment 5 patients had a contralateral breast cancer and 3 patients had distant metastases.

Results: Median survival, after salvage treatment, of the entire group was 24 months. Fourteen patients (27%) suffered a subsequent loco-regional recurrence, 5 of which were outfield, 9 were infield. Actuarial local control stabilized at 20 months (71%). Significant predictors for local control were: time interval to the current loco-regional recurrence, histology of the primary tumor, original TNM classification and number of hyperthermia fractions given. Most cited late toxicity consisted of pigmentation 37%, fibrosis 20%, frozen shoulder 14%, arm oedema 12%, and teleangectasia

10%. Severe late side effect were radiation ulcer 8%, brachial plexopathy 6% and ribnecrosis 6%.

Discussion: Interpretation of these results is difficult due to the heterogeneity of the group. The combination of removal of macroscopic tumour, re-irradiation and hyperthermia appears to achieve a good loco-regional control, with an acceptable risk of side effects.

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Radical breast cancer surgery and its complications

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Aim: Although complications after radical breast cancer surgery are cut to minimum rate by performing modified radical mastectomy, they are still observed and affect mostly quality of life and duration of post operative recovery.

Patients and Methods: During the years 2003 and 2004 total of 1310 modified radical mastectomies were performed at the Institute of Oncology and Radiology of Serbia, in Belgrade. We analyzed the group of 479 breast cancer patients who had modified radical mastectomy during that period. We observed the following complications in patients who had modified radical mastectomy: mortality, infections, bleeding, seroma, neuropathy, lymphoedema of the arm.

Results: The data we obtained showed that these were the complications our patients had after modified radical mastectomy: mortality – none (0%), infection – 35 patients (7.3%), hematoma – 48 patients (10.0%), seroma – 209 patients (43.6%), neuropathy – 57 patients (11.9%), lymphoedema – 14 patients (2.9%) and no complications in 116 patients (24.3%).

Conclusion: We are still not satisfied with relatively high percentage of post operative seroma, which could be explained by the large number patients who had axillary lymphadenoctomy.

This might be avoided by performing sentinel lymph node biopsy (SLNB) and limited axillary dissection of level I and II only.

Thursday, 23 March 2006 16:00–16:45

POSTER SESSION

Metastatic disease

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Limited improvement in the prognosis of patients with primary metastatic breast cancer between 1975 and 2002: a population-based analysis

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Background: About 3%-10% of all breast cancer patients have distant metastases at initial presentation. In the last few decades the treatment of metastatic breast cancer has undergone considerable changes. The aim of this population-based study was to investigate if these changes have improved the prognosis of patient with primary metastatic breast cancer.

Methods: In the period 1975–2002 the population-based Eindhoven Cancer Registry recorded 21.522 patients with primary breast cancer. Metastatic disease at initial presentation was detected in 1089 of these patients (5%). Patients were divided into three groups, according to their date of diagnosis: 1975–1984, 1985–1994 and 1995–2002. This division largely corresponds with the changes in the systemic treatment of metastatic breast cancer. Follow-up was completed until 1 January 2005.

Results: The proportion of patients with primary metastatic breast cancer decreased from 6.0% in the period 1975–1984 to 4.5% in the period 1995–2002.The median survival rates for patients with primary metastatic disease were 18, 17 and 20.5 months respectively for patients diagnosed in the periods 1975–1984, 1985–1994 and 1995–2002 ($p = 0.04$). A multivariate analysis, including age, tumor size and information on the localization of metastatic disease and the number of metastatic sites, showed that patients diagnosed in the period 1995–2002 had a 18% lower death risk (95% confidence interval 4–30) compared to those diagnosed in the period 1985–1994. A stratified analysis according to age group showed a significant improvement in the period 1995–2002 for patients younger than 50 ($p = 0.03$), which appeared to be limited to patients who had survived the first 2 years after the diagnosis of metastatic disease. Improvements were much smaller and not significant for the patients aged 50–69 years or 70 years and older.

Conclusion: The prognosis of patients with primary metastatic breast cancer started to improve after 1994. The observed improvement was only significant for patients younger than 50 years of age. Considering the recent developments in the treatment of metastatic disease, especially the increased use of taxanes and aromatase inhibitors and the introduction of trastuzumab in human epidermal growth factor 2 (HER-2)-positive patients, the full impact of these drugs on a population-based level should become evident in the next few years.

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Phase II study of Docetaxel, Carboplatin, and Trastuzumab (THC) as first-line treatment in patients with HER-2 amplified advanced breast cancer. Changes in circulating tumor cells (CTC), total plasma DNA and Circulating HER-2 ECD

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Introduction: Preclinical and clinical data suggest that docetaxel, platinum salts in combination with the anti-HER2 antibody trastuzumab act synergistically. Results from clinical studies in patients with metastatic breast cancer and in the adjuvant setting corroborate these data. In this phase II study the activity of this regimen was related to changes in circulating biomarkers.

Methods: This ongoing study has enrolled patients with metastatic breast cancer with demonstrated, FISH+ HER2 amplification treated with first line chemotherapy. Patients received TCH on day 1 of a 21 day cycle consisting of Docetaxel 75 mg/sqm, Carboplatin AUC 6 mg/mL.min, and trastuzumab 6 mg/kg (loading schedule in cycle 1). Six cycles were intented, to be followed by trastuzumab until progression. No prophylactic G-CSF or antibiotics were administered. Measurement of total plasma DNA, circulating ECD HER2 and circulating tumor cells (RT-PCR for mammaglobin and CK-19) was done prior to and after the first cycle, and after every three cycles. Radiological tumor measurement was scheduled every three cycles using RECIST criteria. A cardiac evaluation using MUGA was performed every three cycles.

Results: 34 patients were enrolled with a median age 52 years (40–72), with 26 (76%) patients having visceral disease. All patients had measurable disease. 27 had received prior anthracycline containing adjuvant chemotherapy, none had received previous taxane therapy. After a median of six cycles 7 patients obtained a CR and 18 a PR for a RR of 73%, with 8 patients obtaining stable disease and 1 patient suffering from progression. Median duration of response has not been reached. Two patients experienced one episode each of grade 4 neutropenia with fever. In total 190 cycles were administered (1 pts received 5 cycles, 3 pts received 9 cycles and one 8 cycles). No clinical cases of CHF was noted, six patients had a decrease of > 15% from base line LVEF. Tumor response was observed after a median after 3 cycles, but a rapid decrease in both CTC, plasma DNA and circulating ECD HER-2 after cycle 1 was observed in the majority of responding patients.

Conclusion: THC was confirmed to be a very active combination as a first line treatment for taxane-naive patients with HER2 amplification and important visceral disease. All three biomarkers showed a rapid decrease after one cycle in responding patients. Toxicity was manageable. Cardiac toxicity did occur as measured by LVEF, but was clinically of minor importance.