of alkaline phosphatase, Pyr, DPyr and ICTP were significantly increased in 7/25 (28%), 21/25 (84%), 22/25 (88%) and 17/25 (68%) patients respectively (p < 0.001). Therpy significant reduced Pyr (84.4 \pm 12.3 vs. 32.5 \pm 7.6 nmol/mmol creatinin) and DPyr (16.7 \pm 7.1 vs. 9.4 \pm 3.7 nmol/mmol creatinin). There were no changes in osteocalcin and hydroxyproline levels. These results indicate that sequential measurement of Pyr and DPyr can be used to monitoring the results of therapy of bone metastases.

56 POSTER

A combination therapy with mitomycin-C, etoposide, doxifluridine and medroxyprogesterone acetate as second-line therapy for advanced breast cancer

A. Osaki, Y. Ohi, T. Hirai, T. Toge. Department of Surgical Oncology, Research Institute for Radiation Biology and Medicine, Hiroshima University, Japan

Purpose: To determine whether there is a effective therapy for the patients with advanced breast cancer refractory to doxorubicin-containing chemotherapy, we performed combination therapy of mitomycin C, etoposide, doxifluridine and medroxyprogesterone acetate as second-line therapy.

Method: Patients with breast cancer who failed to the previous CAF therapy were designated as those refractory to CAF therapy. A total of 32 patients were included in this trial from January, 1989 through December 1995

Results: Observed responses included 6patients (18.7%) with complete response (CR) and 7 (21.9%) with partial response. Two (50%) out of 4 patients who had bone pain due to bone metastasis noted pain relief. CR and PR were obtained in 4 out of 12 patients who had not responsed to the previous CAF therapy. While grade III myelosuppression was observed in 3 patients, pther adverse effect were minimal.

Conclusion: It is suggested that this combination therapy may be recommended for advanced breast cancer patients as a second-line therapy.

57 POSTER

Mastectomy in addition to chemotheraphy improves relapse free survival in women with localy advanced breast cancer

N. Bajic¹, D. Scepanovic¹. ¹Oncology Department, Clinical Hospital Centre of Montenegro, Podgorica, Yugoslavia

Purpose: The mainstay of treatment for localy advanced breast cancer (LABC) is chemotherapy (CT). Additional mastectomy improves relapse free survival (RFS) and overall survival (OS) in women with LABC.

Methods: We analysed 135 women with LABC in period from 1992 to 1997. Among them, 84 patients with mean age 51, 25 (min 38, max 65) had undergone mastectomy and postoperative RT in addition to CT while 51 patients with mean age 57, 6 (min 44, max 74) were treated with CT and radical RT. Mean follow up period for both groups of patients was 23 months (min 6, max 48 months for group with mastectomy and min 10, max 40 months for group without mastectomy). In these two groups we studied RFS and OS according to age, nodal status and tumour size.

Results: In the operated group of women (84) mean time to progression (TTP) was 20 months (min 6, max 36) and in nonoperated group of women (51) mean TIP was 14, 3 months (min 6, max 24). 2 years RFS was 22% and OS was 48% for operated group, while for nonoperated group 2 years RFS was 1% and OS was 42%.

Conclusion: LABC represents disease stage with a very poor prognosis. Although there was no statistically significant difference in OS among two analysed groups of patients, there was statistically significant difference in RFS depending on prognostic factors previously mentioned.

58 POSTER

Improving results in the treatment of locally advanced T4 breast cancer

M.T. Ionta, M.P. Nicolosi, R. Murru, M.G. Mascia, A. Scanu, B. Massidda. Dept. of Medical Oncology University of Cagliari, Italy

Between 1990 and 1997 63 patients with T4 N1-3 M0 breast carcinoma were treated at our Institute. Storically, at first from 1990 to 1995, 43 patients aged from 36 to 71 years (median 51), PS 0-1, 20 premenopausal, with T4 breast carcinoma, following the tru-cut biopsy for the histology (31 infiltracting ductal, 8 infiltracting lobular, 4 mixed) and prognostic factors (ER15+/28-; PgR 12+/31-; 23G2, 20G3; Ki67 7+/36-) were treated with

3–5 cycles of primary standard chemotherapy (FEC 50, or HD-Epirubicin, or MMM). Clinical response: CR 1/43 (2.3%), PR > 50% 25/43 (58.1%), PR < 50% 15/43 (34.8%) and NC. 2/43 (4.6%). Surgery was performed in 41 pts (95.3%), 38 (88.3%) demolitive and 3 (7%) conservative. Pathological response was pTo 2/41 (4.8%), pT1 5/41 (12%), pT2 18/41 (44%), pT3 6/41 (14.6%) while 10 (24%) remained pT4. Lymphnodes were involved in 100% of cases, 1–3: 11 (27%); 4–10: 17 (41%), >10: 13 (32%). At median Follow-up of 57 months (27–93) the median DFS is 21 months (3–75) and OS 37 months (10–75). 33 pts (76.7%) relapsed and 10 (23.3%) are disease-free. 25 pts (58%) died and 18 (42%) are still alive. Relapses were directly proportional to the LN number (1–3: 64%; 4–10: 82%; >10: 85%), while survival inversely (64%, 35%, 31% respectively).

Afterwards from 1996 we initiate a study to evaluate the effectiveness and the toxicity of a combination of Lonidamine (450 mg/die), CDDP (50 mg/mq), Epirubicin (100 mg/mq), Vinorelbine (25 mg/mq), day 1–21. Until now we treated 20 T4 pts in age from 39 to 68 years (median 50), 11 premenopausal, PS 0–1, 17 infiltracting ductal, 3 infiltracting lobular, ER11+/9–; PgR 7+/13–; 18G2, 2G3; Ki67 9+/11–. Clinical response: CR: 7/20 (35%); PR > 50%: 13/20 (65%). Surgery was feasible in 100% of 18 evaluable cases, 12 demolitive (67%) and 6 conservative (33%). Pathological response: pTo 2/18 (11%); pT1 5/18 (28%); pT2 8/18 (44%); pT3 1/18 (6%); pT4 2/18 (11%); pLN0: 4/18 (22%); pLN 1–3: 5/18 (28%); pLN 4–10: 6 (33%); pLN > 10: 3/18 (17%).

Conclusions: the L-PEV regimen is more active than the first that we used, in terms of global clinical response (100% vs 60%), clinical CR (35% vs 2.3%) and patholocical CR (11% vs 4.8%) of the primary and nodes (pLN0 22% vs 0%). Since in the our first trial relapses and survival were strictly correlated to the pathological status of LN, the high activity of L-PEV also at nodal level may better the outcome of these patients.

59 POSTER

Continuous infusion of adriamycin + cyclophosphamide + 5-fluorouracil in disseminated breast cancer

V. Karasyeva¹, O. Zharkova¹, N. Promzeleva². ¹Department of Chemotherapy, Tomsk; ²Oncological Hospital, Novokuznetsk, Russia

Purpose: The aim of this study is to improve the treatment efficacy of the patients suffering from disseminated breast cancer by increasing the dose of chemodrags using a continuous infusion.

Methods: The program includes three chemotherapeutic agents: adriamycin in a dose of 20 mg/m2/24 hours, from 1 to 5 days i.v. as a 120-hour continuous infusion, 5-fluorouracil in a dose of 500 mg/m2 on the 1-st and the 8-th days i.v. and cyclophosphamide in a dose of 600 mg/m2 on the 1-st and the 8-th days i.v. Continuous infusion is performed through a catheter plased in v. subclavia. The treatment according to this program has been performing at Chemotherapy Department since 1995. A total of 21 women aged 38–64 have been treated. There were 6 women in premenopause, 15 patients in postmenopause. Performance status (ECOG) was 0–2. All the patients were histologically diagnosed as having breast cancer. The localization of metastases was the following: periferal lymphatic nodes – 14, lungs – 4, bones – 8, intracutaneous – 5. Each patient reseived 2 or more courses of chemotherapy. The total number of courses was 50.

Results: Complete regression was observed in 6 cases (28.6%), parcial regression in 10 (47.6%), no change 4 patients (19.0%), progression 1 case (4.8%). Complication included leukopenia. I–II gr.-20 courses, III–IV gr.-6 courses; anemia I–II gr.-4 courses, stomatitis I–II gr. 15 courses, III gr.-2 courses, nausea/vomiting I–II gr.-12 courses, III gr.-2 courses, alopecia – practically in all the patients.

Conclusion: The total effect of the program was considered to be rather high – 76.2%. Toxicity was acceptable. Long-term results are being studied.

60 POSTER

Sonomammography an objective tool for assessment of chemotherapeutic response in locally advanced breast cancer

A. Kumar¹, S. Agrawal¹, R.C. Shukla². ¹Department of Surgery; ²Department of Radiology, Institute of Medical Sciences, Banaras Hindu University, Varanasi 221 005, India

Purpose: Primary chemotheraphy in locally advanced breast cancer (LABC) produces objective clinical response. In a prospective study the role of sono-mammography has been evaluated as a tool for monitoring the objective tumour response following primary chemotherapy.

Methods: Patients with LABC were treated with Primary Chemotherapy. Ultrasonography was done using 7.5 MHz probe before commencing each