

13.8%. LRR-rate with breast- and axillary surgery was 12.1% compared to 15.4% in the group treated with breast surgery only ($p=0.76$). Disease free survival (DFS) was 48.7% vs. 39.5% and overall survival (OS) was 45.5% vs. 38.5% respectively.

Conclusion: Our results show no benefit from ALND in terms of locoregional recurrence rate, DFS or OS. However combining ALND with regional radiotherapy is associated with more morbidity.

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Chest wall radiation associated sarcomas are sensitive to reirradiation and hyperthermia

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Background: Radiation associated sarcomas occur in about 0.5 per thousand irradiated patients and are often angiosarcomas. They tend to bare an extremely poor prognosis and are believed to be radiation resistant. A series of nine radiation associated sarcomas of the chest wall is presented, treated by re-irradiation and hyperthermia in the Academic Medical Centre in Amsterdam.

Patients and methods: From 1984 to 2007 nine patients were referred. Eight women, one man, mean age 73 years (48–91). Mean interval from previous cancer (breast/Hodgkin's disease) was 75 months (19–132). Six had angiosarcoma, three not otherwise specified (NOS). One patient was metastasised at diagnosis and one was referred immediately after diagnosis, the others were referred after one (3 pts) two (2 pts) or three (1 pt) attempted resections or systemic treatment, with a mean interval since diagnosis of 5.5 months (3–16). One patient had no apparent tumour at referral and the remaining eight had a mean largest tumour size of 13 cm (1–25), usually an area of multiple nodules. Radiotherapy was applied to the tumour area plus a generous margin. One patient received 6 fractions of 2.5 Gy in 2 weeks, one received one fraction of 6 Gy (and refused further treatment). The other seven patients got 8 fractions of 4 Gy in 4 weeks, all with hyperthermia once weekly, aiming at 41–43°C for an hour.

Results: One patient stopped after one session, and was not evaluable for response. One had local and distant progression shortly after his treatment; one had minor regression; one a good partial remission and five a clinical complete remission. Three patients are alive without progression after 7, 15 and 39 months. One died of suicide two weeks after start of treatment, one of unknown cause (2 months) and four of metastatic sarcoma at 2, 4, 8 and 8 months respectively. Only one of the six responding patients developed a local recurrence before death.

Conclusion: It is difficult to draw conclusions from a small and heterogeneous patient cohort. Yet, with five complete remissions and one partial remission in 8 evaluable patients it is suggested that radiation associated sarcomas are sensitive to reirradiation plus hyperthermia, in contrast to what is often believed.

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Perioperative chemotherapy (CT) with induction sequential epirubicin (EPI) and docetaxel (DOC) followed by surgery and DOC or gemcitabine/vinorelbine (GEN) with radiotherapy for locally advanced breast cancer (LABC)

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Background: Anthracyclines (AC), Taxanes (TAX), Vinorelbine and Gemcitabine are among the most active cytotoxics in BC. The mature results of a multimodal treatment tailoring these drugs perioperatively in LABC are presented here.

Patients and Treatments: Stage III pts ECOG-PS <2 were eligible. A true-cut biopsy documentation had to be performed before the start of CT. Treatment consisted of 4 EPI (100 mg/m² D1q2w) followed by 3 DOC (100 mg/m² D1q3w); surgery 3–4 weeks from CT completion, followed by RT and CT according to response (PR/CR: DOC, NC/PD: GEN). Primary endpoints (a) response and conversion to operability/conservative surgery, (b) Time to Recurrence (TTR) and Overall Survival (OS).

Results: 56 women aged 32–75 (median 52 years), 24 IIIA and 32 IIIB were enrolled; 53 pts completed the entire program. Toxicity was acceptable; no treatment related death. Median RDI for all drugs was 100%. Efficacy: Clinical RR 71.4% (40pts); 33.9% cCR's. Pathological RR 67.8% (38pts); 21.4% pCR's. 33 (58.9%) and 19 (33.9%) radical and

conservative operations without increased morbidity. After a median follow-up of 62mo, median OS has not yet been reached while median TTR was 42 mo. TTR was favourably affected by path resp, RT and postop DOC ($p=0.005$), while OS was longer in pts with clinical and pathological response, RT and postop DOC ($p=0.038$). Preoperative CT seemed to be equally active throughout all subgroups according to histology, ER/PR and HER2 status.

Conclusions: The treatment program of the present study allowed for the completion of an effective therapy at the cost of acceptable toxicity. The vast majority of our patients completed the full program thanks to the type of tailoring sequential and postop CT and RT. The results of this study, conducted in the "pre-HER2 era" suggest a central role of CT for LABC and the value of eventually dose-dense, AC- and TAX-based CT in a large proportion of LABC pts, regardless of biological tumor profile. The integration of anti-HER2 and other biological therapies may further improve the longterm control of LABC.

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Local recurrence of breast cancer following mastectomy

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Background: Breast cancer is the most common cancer among Turkish women. Surgical treatment options for breast cancer include partial mastectomy with axillary dissection and radiation therapy or mastectomy. Mastectomy has long been the gold standard for treatment of breast cancer and is performed frequently in Turkey since it's first choice of our patints. Local recurrence after mastectomy depends on the initial extent of disease (tumor size, lymph node status) and type of primary therapy (radiotherapy, chemotherapy). This study examines the factors that influence of local recurrence of breast cancer in women who underwent mastectomy.

Materials and Methods: A 10-year retrospective review was performed using the Breast Cancer Registry data at Akdeniz University Hospital, a tertiary care facility in Antalya, Turkey. All female patients who underwent modified radical mastectomy for invasive breast cancer between 1996 and 2006 were included. Patients received radiotherapy if the number of positive axillary lymph nodes greater than three. Breast cancer registry data were reviewed for local recurrence of breast cancer. Local recurrence is defined as the reappearance of breast cancer in the skin flaps, in the mastectomy scar on the chest wall or in the ipsilateral regional lymphatics. Follow-up has ranged from 2 to 12 years. Statistical analysis of recurrence rates was performed using Pearson's chi-square analysis and logistic regression analysis.

Results: During this 10-year period, 412 mastectomies were performed. There were 12 (2.9%) local recurrences in study period. The mean follow-up time was 5.3 years (range 2–12 years). Patient age ≤ 40 years ($P=0.055$), tumor size ≥ 3 cm ($P=0.036$), axillary lymph node metastasis ($P=0.039$), number of metastatic axillary lymph nodes ≥ 6 ($P=0.001$), pathologic stage \geq stage IIB ($P=0.001$), histological grade III ($P=0.014$), lymphatic and/or vascular invasion ($P=0.004$), estrogen receptor status negative or unknown ($P=0.016$) were found that prognostic factors for local recurrence. Number of metastatic axillary lymph nodes ≥ 6 (HR 4.9, CI 1.31–18.6), histological grade III (HR 4.1, CI 1.01–16.97) and estrogen receptor status negative or unknown (HR 5.1, CI 1.04–25.24) were found Independent risk factors for local recurrence by logistic regression analysis.

Conclusions: In addition to number of positive axillary lymph nodes, predictors of local recurrence include tumor related factors, such as increasing tumor grade and negative estrogen receptor status. In conclusion, local recurrence following mastectomy was related not only initial extent of disease but also related to pathological specifications of primary tumor.

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Analysis of biomarkers (P27, PTEN, and IGF-IR) after preoperative systemic treatment with the combination of docetaxel and trastuzumab in patients with locally advanced HER2-overexpressing breast cancer (Tokai Breast Cancer Clinical Research Group: TBCRG)

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Background: There are no standard treatments for locally advanced breast cancer (Stage IIIB and IIIC including inflammatory breast cancer). We