

were T2 and 1 (3%) was T1. 21 tumours (62%) were N0, 8 (23%) were N1 and 5 (15%) were N2, and 4 (12%) also had M1 disease. Overall RR (CR +PR) was 94%. After 6 cycles 6 tumours (17.6%) had a CR, 26 (76.4%) had a PR, 2 (6%) had SD. None had progressed. At presentation, 17/34 tumours (50%) were inoperable (IO), 16(47%) would have been suitable for M and 1(3%) suitable for WLE. Post IFEC, of the 17 IO tumours, 1 (6%) achieved CR, did not require surgery, 4 (23.5%) had WLE, 8 (47%) had M and 4 (23.5%) were not operated upon due to M1 disease. Post IFEC, of 16 tumours previously suitable for M, 5 (31%) did not require SR, 8 (50%) had WLE and 3 (19%) had M. Over 95% of DI was delivered for E in 80% patients, for C in 79% and for 5FU in only 29% patients. Less than 75% DI for 5FU was delivered in 24% of patients. IFEC had the following toxicity: 100% grade 2 alopecia, 30% grade 2 and above PPE, 12% grade 4 neutropenia, with 3% neutropenic sepsis. Indwelling catheter complications included: 4/33 (12%) line site infection, 2 (6%) required re-siting of catheter, and 2 (6%) line-associated thrombus.

Conclusion: Primary IFEC is an OP treatment, producing high RR and surgically significant downstaging of LABC. IO tumours are rendered operable, and M can be avoided. Toxicity is acceptable.

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POSTER

Mammary ductoscope in diagnosis of breast nipple discharge

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Breast nipple discharge is one of the symptoms of breast cancer. However, patients with breast nipple discharge dose not necessarily have breast cancer. Therefore, it often cause panic among the patients and difficulties in diagnosis for the doctors. About 3-6% of patients who came to our breast surgical outpatient service had the nipple discharge as the chief complaint. According to various reports, 5-21% of patients with nipple discharge had breast cancer, 35-48% had intraductal papilloma, 17-36% had ductal ectasia, and other diagnoses including fibrocystic disease, mastitis, etc. were also observed. Other studies indicated that the different types of discharge revealed differential risks of breast cancer. For example, the rates of confirmed breast cancer among patients of bloody and serous discharge were 27% and 34%, respectively. The common diagnostic methods used for years include palpation, mammography, breast ultrasonography, cytological test, and galactography. Recently, the Medical Science Company in Japan developed a new tool, mammary ductoscope (0.8mm in diameter), for the diagnosis of breast of breast nipple discharge. We applied this new device to 15 patients whose cause of nipple discharge was unable to be identified through the traditional diagnostic methods during the period from April

1999 to July 2000. Except one Patient with narrow mammary ducts, the rest (25) patients were all-capable of taking the examination and underwent the procedure successfully. Among them, 3 were diagnosed with early stage breast cancer, 9 with intraductal papilloma, 3 with ductal ectasia, and 8 with fibrocystic disease.

In summary, the mammary ductoscope can assist in making differential diagnoses as well as locating the focus, which makes it a good option for diagnosing breast nipple discharge with unknown clinical origin.

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POSTER

T1 breast cancer and axillary lymph node metastases

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Purpose: Determination of factors associated with the incidence of axillary lymph node metastasis (ALNM) in T1 tumors and cases in which axillary dissection could be omitted.

Methods: Data from 245 patients with T1 primary invasive breast cancer (size ≤ 20 mm) who underwent either mastectomy or wide local excision of the tumor and axillary dissection were reviewed.

Results: ALNM was found in 78 of 245 patients with T1 tumors (31.8%). Tumor size was found to be the only independent predictor of ALNM, having a directly analogous relationship with the probability of invaded nodes: T1a (≤ 5 mm) tumors had 0% ALNM, whereas T1b (5 mm $<$ T1b ≤ 10 mm) and T1c (10 mm $<$ T1c ≤ 20 mm) tumors had 27.5% and 35.3% ALNM respectively. Among the other factors studied (patient's age, tumor size, hormone receptor status, histologic type and grade of the tumor) only the histologic grade of the tumor cells appeared to correlate with the incidence of lymph node involvement, but this was not statistically significant.

Conclusion: Only tumor size has statistically significant correlation with the incidence of ALNM. Routine axillary dissection could be omitted only in patients at minimal risk of ALNM (ductal carcinoma in situ and T1a) and when treatment decisions were not influenced by lymph node status (e.g. elderly patients with clinically negative axilla). Axillary dissection (at least levels I and II) should be performed in all cases with primary invasive breast cancer with tumor size > 5 mm.

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POSTER

Long-term outcome of male breast cancer. A single institution experience

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Background: Male breast cancer is almost an orphan disease. It comprises only 1% of all cases of breast cancer, and treatment strategies are basically extrapolated from those effective in women.

Aims: To analyze the clinical features, treatments and long-term outcome of breast cancer in males.

Patients and Methods: Records of 5914 patients with cancer (1317 with breast cancer) treated at our institution from January 1994 to March 2001 were searched looking for males with breast cancer.

Results: Twenty-one men with breast cancer were treated. Median age was 65 years (range 39-87). Histology was infiltrating ductal carcinoma in 19 patients, intraductal carcinoma in 1 and papillary carcinoma in 1. Stage at diagnosis was 0 in 1 patient (5%), I in 3 (14%), II in 4 (19%), III in 6 (28%) and IV in 7 (33%). Treatment for stages I-III included mastectomy with axillary dissection followed by anthracycline-based chemotherapy plus postoperative irradiation and tamoxifen. Therapy for stage IV patients included palliative hormonotherapy and chemotherapy. Disease-free survival at 5 years was 27%. Overall survival was 36% at 5 years.

Conclusions: Male breast cancer, presenting mostly in aged men, is usually diagnosed in advanced stages with fair prognosis, that might be improved with diagnostic and treatment programs specifically tailored to this population.

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POSTER

Down-regulation of the zeta-chain in sentinel node biopsies from breast cancer patients

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Background: In several neoplastic diseases, immunosuppression has been shown to correlate with disease stage, progression and outcome. As the prognosis for metastatic breast cancer still is pessima, additional strategies are being sought to improve survival. Local immunosuppression in sentinel node biopsies from 24 breast cancer patients was evaluated as a possible way to select patients for immunotherapy.

Method: Sentinel node biopsy was performed in 24 women operated for primary breast cancer. Specimens were snap-frozen and double-stained for the zeta-chain of the T-cell receptor. The degree of down-regulation of the zeta-chain was evaluated in three different areas of the lymph nodes: primary follicles, secondary follicles and paracortex.

Results: We observed immunosuppression of varying degree in all 24 sentinel node biopsies. A high degree of down-regulation (more than 50% of T-cells not expressing the zeta-chain) was seen in the primary follicles of 6 patients (25%), the secondary follicles of 13 patients (72%) and the paracortex of 19 patients (79%).

Conclusion: Local immunosuppression was seen in sentinel node biopsies of breast cancer patients. In addition to possible prognostic implications, the sentinel node might be the appropriate location for detection of early-stage immunological down-regulation, which might open the possibility to select those patients who could benefit from immunotherapy.