and evaluation of disease free survivals interval and overall survival rates require further investigation and longer follow-up.

51 POSTER

Sequential doxorubicine (DOX) and docetaxel (DOC) as neoadjuvant chemotherapy in locally advanced breast cancer (LABC): A pilot study

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DOX is the best single agent for treatment of breast cancer and plays an important role for adjuvant treatment. Many observations showed that taxanes, especially DOC, still could remain active in DOX resistant cases. It is therefore logical to try to combine these 2 agents. Instead of giving them simultaneously at reduced dosis, we gave full dosage of both sequentially to patients with LABC. Between 06/97 and 12/97, 8 patients (stage IIIb), received first 2 cycles of DOX 75 mg/m^2 (q3w), followed by 2 cycles DOC 100 mg/m^2 (1 hour infusion, q3w). Clinical, biochemical and radiological evaluation of response were performed after the 2nd and 4th cycle. Thereafter, loco-regional treatment was administered and systemic treatment was planned in function of observed response. All patients had objective regression, according to the UICC criteria (2CR, 6PR). In 1 pt. we found no invasive tumor after surgery, only DCIS. Evaluation of early response after 2 cycles proved very difficult because of poor sensitivity and specificity of clinical examination and mammography. There were no serious complications. Dose reduction during 2nd course of DOC (75%) was only necessary because of mucositis (1) and myalgia (1). We conclude that a high response rate can be achieved within 12 weeks with the proposed regimen. Because of the poor reliability of clinical and radiological evaluation, new techniques like MRI or PET-scan deserve consideration. This regimen could also be compared to others for inducing response in LABC. Further research should also focus on optimizing loco-regional and maintenance systemic treatment.

52 POSTER

Neoadjuvant hormonal therapy in locally advanced breast cancer

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Background: Management of locally advanced breast cancer (LABC) it's not consensual. In post-menopausal women, particularly in the elderly, primary hormonal therapy (HT) is an option, to convert an inoperable tumour into operable.

Objective: To evaluate the influence of a neoadjuvant HT protocol in local control of the disease (tumour downstaging and HR status).

Methods: We used a prospective non-randomised study between Jan/93 and May/94, which included 28 pts. An initial evaluation was made through clinical examination, ultrasonography and incisional biopsy with HR determination. The neoadjuvant HT consisted in a minimum of two months therapy with Tamoxifen (20 mg/day). In all pts, a clinical and/or ultrasonographic revaluation was made. A radical mastectomy was then proposed, with a new HR determination. The treatment was completed with adjuvant Radiotherapy and HT. The median Follow-up was 50 months (range: 11–62).

Results: The median age was 72 years (range: 52–86). *Initial evaluation*: Twenty-two (79%) pts were in stage III-B and six (21%) pts in stage III-A. In 27 pts, ductal invasive Ca was found and lobular invasive Ca in one. The ER were positive in 24 (86%) pts and PR n 18 (64%) pts. Ultrasonography was used to study tumour size and axillary lymph nodes. *Post-HT evaluation*: Clinical and/or ultrasonographic response was observed in 20 (71%) pts, with two complete remissions. No relevant side effects were found. *Postoperative evaluation*: Tumour downstaging occurred in 22 (79%) dts; in three other pts, there was a significant decrease in tumour size. HR status changed in 10 (36%) pts.

Conclusions: 1- Neoadjuvant HT can play an important role in LABC management, mainly in the elderly. 2- Tamoxifen had a good response rate (71%) and was well tolerated. 3- Correlation between clinical and pathologic responses occurred in 22 (79%) pts.

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Photodynamic therapy versus laser induced thermotherapy in the treatment of local recurrences and skin secondaries of breast cancer

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Aim: The effect of photodynamic therapy (PDT) and Laser induced thermotherapy (LITT) as palliative methods in otherwise pretreated patients on locoregional recurrences should be investigated.

Material and Methods: The PDT was currently performed on 6 women using the Photosan 3 (HPD) as a photosensitizer, the irradiation was performed with laser light at a wavelength of 630 nm 48 h, 72 h and 196 h after photosensitization. – In 10 women with locally advanced breast cancer and pretreatment with surgery (primary and secondary mastectomy, m. latiss. dorsi-flap), irradiation and chemotherapy, an interstitial laser application was performed percutaneously into the center of the diseased tissue. The laser used was a Nd:YAG laser with a wavelength of 1064 nm. Heat expansion was controlled digitally and monitored by ultrasound and colour coded duplex sonography (CCDS), respectively.

Results: All patients are scheduled for long-time follow-up. The initial results of PDT are promising. – LITT enabled the precise coagulation of the tumour without ulceration or destruction of the skin, although these areas had been pretreated by radiotherapy up to 60 Gy, before.

Conclusion: PDT and LITT are safe and minimal invasive methods for palliative treatment of subcutaneous local recurrences of breast cancer.

54 POSTER

Diagnostic problems of evaluating bone metastasis from breast cancer by proliferative activity: Comparison of findings between bone scintigraphy and MRI and their relationship to prognosis

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Purpose: Bone metastases from breast cancer are frequently observed, however, diagnosis and treatment are difficult in many cases. We evaluated the relationship between diagnosis of bone metastases of breast cancer and clinicopathological factors.

Methods: We enrolled 51 breast cancer patients with vertebral matastases diagnosed by plain radiography, bone scintigraphy or MRI. Diagnosis of bone metastases was classified into the following groups: the A group: those who showed similar findings in plain radiography, bone scintigraphy and MRI; the C group: those who showed no abnormalities in radiography or scintigraphy, and their lesions were diagnosed by MRI.

Results: Twenty-four of 51 patients were included in the A group, while 14 were included in the C group. Regarding the relationship with clinicopathological factors, a significant number of patients with ER-negative tumors demonstrating a high level of DNA polymerase α, short disease-free intervals (DFI) and metastases to other organs were included in the C group. Prognoses of patients were apparently poor in the C group.

Conclusion: Bone scintigraphy sufficiently reflects foci in patients with ER positive or low proliferative tumors, while false negative bone scintigraphy is likely in patients with ER negative or highly proliferative tumors. MRI was useful in diagnosing such patients. Therefore, consideration of malignancy such as proliferative activity and ER is thought to be necessary during postoperative follow-up of breast cancer patients.

55 POSTER

Changes in biochemical markers of bone turnover in breast cancer patients with bone metastases

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The understanding and the monitoring of metastatic bone disease remains unsatisfactory. this study we compared several markers of bone turnover in 25 breast cancer patients with bone metastases, aged 48–70 years. All patients were treated with pamidronate 60 mg i.v. every month in addition to standard endocrine or chemotherapy. Blood or urine measurements included total and bone alkaline phosphatase, osteocalcin (BGP), hydroxyproline, pyridinoline (Pyr), deoxypyridinoline (DPyr) and ICTP were performed baseline, 1, 3 and 6 months after starting therapy. The mean values