356

THE SURGICAL TREATMENT OF IMPALPABLE BREAST LESIONS' DETECTED BY NEEDLE LOCALIZATION

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From 1/91 to 8/92 44 women were operated in our department due to suspicious findings in mammography, which were followed with detection by needle localization. The size of the tumors in all women was less than 1 cm in diameter. The pathological findings in 32 women (75%) were benign and in 11 patients (25%) breast cancer was found. On 3 DCIS and 3 patients with invasive tumor (infiltrating carcinoma) conservative treatment was performed. Mastectomy was performed in 1 DCIS, 2 multi-foci DCIS and 2 invasive tumor patients. An early discovery of breast cancer, the most common tumors in Israeli women, may enable efficient treatment. Mammography is the most valuable apparatus for breast tissue imaging. It demons'trates impalpable findings and enables the performance of accurate needle-localization breast biopsy. Our results emphasize the need to find a better method to select suspicious mammographic findings. The possibility to define a uniformed treatment is infinitesimal because of the great number of variables in tumors as well as in the patient herself. Nevertheless, The accumulated information of decoded mammography findings may minimize the unnecessary operations due to false evaluation.

357

THE ROLE OF BRACHYTHERAPY IN THE TREATMENT OF CHEST-WALL RECURRENCES OF BREAST CARCINOMA.

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Between 1984 and 1992, 34 patients with chest wall recurrences of breast carcinoma were treated by a combined modality, surgical resection of the disease, brachytherapy and external beam in previously non irradiated patients. The primary tumor was in stage I 28 patients and stage II in 28 patients. The median interval between first surgical intervention and the appearance of the chest wall recurrence was 28.5 months. Unifocal recurrence was in 28 patients and multifocal in 9 patients. The patients were afterloaded intraoperatively in 21 patients and postoperatively in 13 patients. The median target area was 36/cm2 ranging from 24 to 117/c². A low dose rate remote afterloading microselectron machine was utilized for 192 ir. treatment. A long term local control was achieved in 28 patients (82%).

358

RISK FACTORS FOR LOCAL RECURRENCE AFTER SECTOR RESECTION IN BREAST CANCER STAGE I:RESULTS FROM A RANDOMIZED TRIAL

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Riskfactors for local recurrence after sector resection with or without postoperative radiotherapy was analysed in a prospective randomized trial.

After five years of follow up 43 local recurrences, six of them in the radiotherapy group, were analysed according to patient and tumor characteristics.

Univariate analysis identyfied comedo cancers (p=0.0001), lobular cancers(p=0.02), high nuclear grade (p=0.0002), high histologic grade(p=0.04) and pre- and perimenopausal patients(p=0.04) to have a higher risk of local recurrence. Tubular cancers had a statitically significant lower risk(p=0.02) of local recurrence.

In the multivatiate analysis comedo cancers(p=0.007) and low age(p=0.03) were identyfied as statistically significant high risk factors.

359

INTERSTITIAL VS. EXTERNAL RADIATION BOOST IN 417 BREAST CANCERS TREATED BY BREAST CONSERVATION THERAPY

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417 breast cancers in 411 women were treated between 1969 and 1984 with tylectomy, axillary dissection, and radiation therapy. Follow-up minimum 5 years, median 8 years, and range 5-20 years. After external radiation to the breast of 46-50 Gy, 381 cases (91%) received boost doses of 10-22 Gy with an interstitial implant in 217 cases (57%), electron beam in 154 cases (40%), or photons in 10 cases (2.6%).

Patients were analyzed as to local failure in the breast, lymph node failure, or distant metastases (no difference as to radiation technique), and cosmesis, stressing surgical, radiotherapeutic and boost parameters of importance.

360

RADIOTHERAPEUTIC TREATMENT OF BREAST CARCINOMA - RESULTS AFTER BREAST CONSERVING THERAPY AND MASTECTOMY

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The results of this retrospective study about 491 primary breast cancer patients treated with mastectomy (n = 384) or conservation surgery (n = 107) and irradiation (chestwall/breast, axillar, supraclavicular and internal mammary field; 50 Gy at 2 Gy/day; Cobalt[60]; 5x/week in 2 series) have to prove that breast conserving therapy (=BCT) together with irradiation is a responsible alternative in treatment of local operable breast carcinoma (T1-2 N0-2M0). Presumption for stastical evaluation (Lifetable-method of KAPLAN-MEIER) is the comparison of both groups fixed by T and N, grading, age and localization of tumor. The 5-year survival in the BCT patients was 87% vs. 70% in the mastectomy group (statistically significant). The results for 5-year recurrence-free survival were 96% vs. 94% and for control of metastatic disease 90% vs. 79%. Likewise the comparison of 5-year survival in T1 tumors (49 vs. 100 pat.), in N0 (72 vs. 221 pat.) and N1 (22 vs. 86 pat.) show statistically significant better results in BCT: 92% vs. 79%, 89% vs. 80% and 95% vs. 65%.

361

EXCLUSIVE BRACHYTHERAPY AS RADIOTHERAPEUTIC TREATMENT AFTER CONSERVATIVE SURGERY FOR BREAST CANCER

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From March '89 to February '92, 105 T1-T2 breast cancer patients were submitted to quadrantectomy, axillary dissection and Ir192 implant of the surgical bed.
PATIENT CHARACTERISTICS: Age: median 50 years, range 29-71years; stage: T1: 69, T2: 36; pN0: 64; PN1: 41. Histology: lobular 17, ductal+lobular 3, ductal (all types) 85. Specimen margins: negative 97, positive DCIS: 2, positive invasive ca.: 6. Follow-up: median 37 months (range 12-48).
SURGICAL PROCEDURE: Radial incision with minimal skin removal, suture of the margins of the resected parenchima with no dead space left in the breast.
ADJUVANT THERAPY: pts with positive axillary nodes were submitted to chemotherapy (CMF) if premenopausal or tamoxifen if postmenopausal.
IMPLANT TECHNIQUE: Implant perpendicular to the scar, numbers of lines sufficient to include the entire quadrant and the nipple, active length 7 cm. Dose: calculated according to the Paris system: 50 Gy: 2 pts; 54 Gy: 21 pts; 55 Gy: 5 pts; 60 Gy: 71 pts.
RESULTS: Breast recurrences: 6 (2 in the surgical bed, 3 in a different quadrant, 1 inflammatory carcinoma). Survival: 1 pt died of disseminated disease without local recurrence. 1 pt died for causes other than breast cancer. All pts who developed breast recurrence are alive (2 with distant metastases and 4 without evidence of disease).