Results: Subjective palliative effect was obtained in 33/42 evaluable eyes for a 76% of cumulative (partial or complete) response. The most frequent acute side effects was conjunctivitis (12 patients). As late side effects, 2 cases of cataract were observed.

Conclusions: In our experience external beam radiation therapy provides useful palliative treatment for ocular metastases from breast cancer.

271 POSTER

Nine years results of breast carcinoma conservative treatment for 295 pTI \leq 10 mm N- without adjuvant medical treatment

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From January 1984 to December 1988, 1163 patients with breast conservative treatment (surgery + radiotherapy) without adjuvant medical treatment were entered into F.N.C.L.C.C. prospective multicenter study. Among these 1163 patients, 295 had an histologic tumor size ≤10 mm. With a median follow up of 9 years, 9.5% (28 cases) developed a local recurrence (LR). In univariate analysis, histologic gracle: GI (13 LR/145: 9%) versus GII + III (8 LR/93: 8.6%), ductal carcinoma in situ: DCIS + (8 LR/88: 9%) versus DCIS – (20 LR/200: 10%) and progesterone receptor PR + (12 LR/145: 8.2%) versus PR – (5 LR/60: 8.3%) did not influence local control.

Two factors were statistically significant:

- Age: < 40 years (9 LR/40: 22%) versus > 40 years (19 LR/255: 7.4 (p < 0.0001).
- Estrogen receptor: ER (7 LR/55: 12%) versus ER + (10 LR/152: 6.5%) (p < 0.001).

In multivariate analysis, age \leq 40 years remained the only significant parameter (p < 0.0002).

Conclusion: With a median follow up of 9 years, this study show that local recurrence for pTI \leq 10 mm N- without adjuvant medical treatment are not infrequent (9.5%) with only one significant risk factor: age \leq 40 years (LR: 22%).

272 POSTER

Is it necessary to check blood counts routinely during definitive radiation therapy for patients with early stage breast cancer?

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Purpose: In some departments of radiation oncology blood count checks are done routinely for patients treated with breast conserving therapy followed by definitive radiation therapy. Due to rising costs of treatment we retrospectively analyzed these patients in to evaluate the need of this routine practice.

Methods: From May, 1995 until December, 1997, 51 patients with early stage breast cancer received definitive irradiation after breast conserving therapy. Cytotoxic chemotherapy was used in none of these patients. 59% were treated with tangents atone, 29% with tangents and sternal and supraclavicular fields, 6% with tangents and sternal, supraclavicular and axillary fields and 6% with tangents and a sternal field. Complete blood counts were done weekly.

Results: During radiotherapy, a significant decrease of haemoglobine, erythrocytes, thrombocytes, and leucocytes was seen (p < 0.05, Friedman's test). 98% presented anaemia with grade 0 (RTOG/EORTC score), 2% with grade 1. 100% showed thrombocytopenia grade 0. Leucocytopenia grade 0 was observed in 51%, grade 1 in 35%, grade 2 in 12% and grade 3 in 2%. All patients (6% (3/15)) who developed leucocytopenia in the range of 1.8 Gpt/l–2.3 Gpt/l were treated with parasternal portals (p < 0.05, χ^2 -test). Interventions with G-CSF were prompted.

Conclusion: Due to the small number of patients examined so far, our preliminary results should be cautiously valued. However routine checks of complete blood count should be done even for patients not receiving chemotherapy. Especially patients treated with sternal portals might have a higher risk to develop abnormal values. One reason could be the affection of stem cells in bone marrow of the stemum by irradiation and/or of peripheral blood cells in the great vessels and the heart.

273 POSTER

Evaluation of acute local toxicity after postoperative 60 gy to the whole breast in multifocal invasive or in situ ductal breast carcinoma

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Purpose: Multifocality of infiltrating ductal carcinoma (IDC) or presence of in situ form (DCIS), treated with conservative surgery, induced the use of postoperative RT to the whole breast to a total dose of 60 Gy (2 Gy/fract) due to the lack of a precise little volume for booster dose.

Methods: From 2/4/1992 to 1/9/1997 we treated 91 female patients (pts). Depending on histopatology, we divided the pts into 4 groups: pure DCIS (20 pts), DCIS associated with microinfiltrative (mic) ductal carcinoma (9 pts), IDC associated with intraductal component >25% (EIC) (50 pts), multifocal IDC (12 pts). RT on the breast consisted of 2 tangential isocentric fields of 6 MV X photons, the treatments were studied according to the ICRU level 2. Acute and late local toxicities were evaluated according to the EORTO-RTOG scales.

Results: All the pts were evaluable for acute local toxicity: grade 0:18 pts, grade 1:44 pts, grade 2:12 pts, grade 3:20 pts. We evaluated for late toxicity 77 pts (with at least 6 months FU): grade 0:64 pts, grade 1:10 pts, grade 2:3 pts. We registered only 1 local relapse after 7 months from the end of RT and the pts was submitted to simple mastectomy. From september 1997 we modified our schedule of RT giving 50 Gy to the whole breast followed or not, in case of DCIS, by booster dose to the surgical bed, according to the recent literature data.

274 POSTER

Long-term (5–10 year) results of combined treatment of breast cancer patients using gamma-neutron therapy

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Purpose: The study conducted will allow to assess the efficiency of mixed gamma-neutron therapy of locally advanced breast tumors.

Methods: Combined treatment using gamma-neutron therapy was given to 85 patients with stage T1-4N1-3 breast carcinoma. In 24 patients (28.2%) primary infiltrative-edematous tumors were diagnosed. The control group consisted of 100 patients treated using conventional external beam radiation therapy. Total tumor dose was 50 Gy from gamma-component and 2 Gy from fast reactor neutrons (RBE = 5). At the second stage after a 2-week break surgery was performed to 87.8% of patients.

Results: Complete regression of primary tumors was achieved in 22% of patients compared to 7.7% in the control group. The pattern and the rate of early and late radiation complications in the groups were similar. For T3-4N1-3 tumors the overall 5-year survival was 71.8 + 12.1%, compared to 40.1 + 3.8% in the control group. The overall 10-year survival for T3-4N3 tumors was 22.7 + 6.7%. In the control group all the patients died before 10 years

Conclusion: Thus, mixed gamma-neutron therapy significantly improves short-term and long-term treatment results for patients with locally advanced breast cancer.

275 POSTER

Is the timing of radiotherapy after breast conservation surgery for early stage cancer important?

F. Ampil¹, G. Burton², B. Li³, E. Minnard³, F. Abreo⁴, K. Person², L. Ethridge³, G. Mills², H. Chin¹. *Divisions of ¹ Radiation Oncology;* ² Hematology-Oncology; ³ Surgical Oncology; ⁴ Surgical Pathology, Louisiana State University Medical Center, Shreveport, Louisiana, USA

Purpose: The appropriate timing of breast irradiation [BI] following breast conservation surgery [BCS] for early stage cancer remains controversial. Our objective was to examine the temporal relationship of BI and outcome of women after BCS for early stage cancer.

Methods: The times between BCS and the initiation of BI were retrospectively reviewed in 47 patients treated during a 15-year period [1981–1995] for stage I-II breast cancer. BI commenced within [n = 20] or after [n = 27] an interval of four months. Twenty-one patients received chemotherapy before BI. The median follow-up was 47 months [range: 13–122 months].

Results: The local recurrence rate was $5\pm10\%$ [95% CI] (1/20) in women irradiated within four months and $15\pm14\%$ (4/27) in patients treated after

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four months [p > 0.20]; the corresponding mean periods of survival were 56 ± 14 months and 42 ± 6 months [p = 0.046].

Conclusion: Although BI was effective in promoting local disease control, our data suggested that the timing of BI may not have a significant impact in reducing local recurrence despite the improved survival seen with the early application of BI.

276 POSTER

Cosmetic evaluation of breast conserving treatment for mammary cancer

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Purpose: To assess the relationship between cosmesis and factors related to early breast cancer and its management.

Methods: From January 1994 to January 1996 at the Cancer Center and Institute of Oncology in Warsaw fifty-eight patients with early breast cancer were treated using a breast conserving surgery and radiotherapy. Every six month cosmesis was assessed quantitatively and qualitatively by a team of physicians and patients themselves according to precisely defined criteria.

Results: At the median follow up of 19 months in physicians opinion, there was 53% excellent, 37% good, 7% fair and 3% bad cosmestic results. Adjuvant chemotherapy was the main factor adversely influencing cosmesis (p = 0.001). Moreover, cosmesis tended to be worse in patients with: palpable tumors, large breast, cancer treated by quadrantectomy, radiotherapy to the axillary lymph nodes fields. There was a significant correlation between patients and doctors opinion regarding cosmetic results (Cohen's Kappa test = 0.4115).

Conclusions: Our results confirmed that breast conserving treatment produces very good cosmetic results in over 90% of patients. There was very good correlation between patients and doctors assessment of cosmetic results.

277 POSTER

Radiation therapy without boost for breast conserving surgery patients with positive surgical margin or extensive intraductal component

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Purpose: Boost radiation is usually required when surgical margin is positive on breast conserving surgery followed by whole breast radiation. As the volume of Japanese women's mammary gland is small, 50 Gy whole breast radiation may be sufficient to prevent breast recurrence even in time of positive surgical margin.

Method: 124 patients were enrolled in prospective randomized trial for adjuvant therapy of breast conserving surgery. Criteria for this trial was T < 3 cm and N0. Breast recurrence and distant metastasis was observed.

Results: Surgical margin was positive in 15 cases (12.1%). Extensive intraductal component was seen in 41 cases (33.1%). Breast recurrence was none at 3.1 years (median follow-up period) after surgery, whereas distant metastasis was seen in 7 cases (5.6%).

Conclusion: To prevent breast recurrence after breast conserving surgery, 50 Gy standard whole breast radiation may be sufficient even in case of positive surgical margin.

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16:00-18:00

PARALLEL SESSION

Information – communication – education

279 INVITED

Communication skills of oncologists

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Many women with breast cancer are manifestly unhappy with much of the communication that takes place between them and their doctors. The lack of information about the diagnosis, prognosis and potential therapeutic options can cause anxiety, uncertainty, distress and dissatisfaction. Furthermore, poor communication can lead to misunderstandings about the importance of different diagnostic tests, under-reporting of key symptoms and side-effects and poor adherence to treatment regimens or willingness to accept advice. This situation is distressing for patients and their families and is professionally and personally unrewarding for the doctor. Reasons for poor communication are complex and may include such things as characteristics of the patient, the doctor and the system of cancer care delivery. However, one of the primary reasons for the difficulties is the inadequate training given to most oncologists in effective communication skills. This talk will discuss some of the problems and consider training initiatives aimed at correcting the communication deficiencies.

280 ORAL

Parcours de femmes: A survey of opinions of French women with cancer; the first step of a pan-European survey in 16 countries

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Objective: "Parcours de Femmes" was a nation-wide survey conducted in France to assess the status of care of women with gynaecologic or breast cancer to identify methods by which their treatment path could be improved.

Method of Survey: The survey was conducted among cancer patients and healthcare professionals between 1993 and 1996. Two waves of research were undertaken. The first (1993–1994) involved the completion of questionnaires by 2874 women from 96 cancer treatment centres. The second (1995) comprised face-to-face interview with public authorities, health care professionals, financial institutions and employers.

Results: Information was obtained regarding the way in which patients receive their diagnosis; treatments including surgery, radiotherapy and chemotherapy, and the effects of the disease and treatments on women's daily lives both during and after treatment.

Conclusions: Cancer diagnosis is still associated with death; the psychological support at the point of diagnosis until recovery is vital. More information and better explanations regarding the disease, treatments and side effects are also needed. 30% of patients expressed a desire to be involved in the choice of treatment and many women wished that there had been an opportunity to talk with someone outside the medical team.

As a result of "Parcours de Femmes", Bristol-Myers Squibb Oncology Division Europe initiated the Caring about Women and Cancer program (CAWAC) – a unique pan-European effort dedicated to supporting female cancer patients and their carers throughout 16 countries. Patients' survey fieldwork for CAWAC commence in May 1997.

Bristol-Myers Squibb Oncology Division and the French League against Cancer.

281 ORAL

UK National Trial assessing the impact of testing for BRCA1/2 breast/ovarian cancer predisposition genes

M. Watson¹, R. Eeles¹, G. Evans². And the UK Working Party; ¹ Royal Marsden Hospital and Institute of Cancer Research, Surrey; ²St. Mary's Hospital, Manchester, UK

Purpose: The UK Trial has been set up to determine (i) what patients