

## POSTER PRESENTATIONS

**PP-3-9 Acute Toxicities of Concurrent Chemotherapy (CT) & Reduced-Dose Radiotherapy (RT) for Patients Treated with Breast-Conserving Surgery**

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Concurrent administration of CT is known to enhance the toxicity of RT, but the magnitude of this effect is uncertain. From 5/92–10/94, 109 evaluable pts were treated with full-dose oral CMF (6 cycles given every 28 days) & RT (tangents only, 39.6 Gy in 22 fractions; boost, 16 Gy in 8 fractions; RT began on d.15) without planned interruptions. 50% of pts developed moist desquamation (MD) during or shortly after RT. (For comparison, MD occurred in 8% of pts in a prior study of sequential CT-RT.) However, only 5 pts required RT treatment breaks (2–15 days). Grade 4 neutropenia developed during RT in 5 pts, but only 1 pt was hospitalized for fever. 5 other pts received antibiotics during or shortly after RT for skin or wound problems. Only 1 pt developed clinical radiation pneumonitis (Grade 2).

Thus, giving concurrent full-dose oral CMF & reduced-dose tangential-field RT regimen resulted in a high rate of MD but few serious acute toxicities. Data on long-term outcome are required before this regimen can be used outside a protocol setting.

**PP-3-10 Patients Experience with Immediate Breast Reconstruction**

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**Objective:** To evaluate patients' reactions after completed immediate reconstruction for breast cancer.

**Design:** A semi structured interview with 20 women.

**Results: Preoperative information:** 2/19 patients felt that the surgeon alone took the decision, 5/19 were unsatisfied with the preoperative information given and 12/19 were mostly satisfied.

**Early postoperative period (< 3 months):** 15/20 patients felt some kind of anxiety and/or need of additional psychological support. Only 3 patients felt the need of psychiatric expertise whereas the remaining 12 felt that the regular staff could have acted more empathetically.

**Late postoperative period (3–12 months):** The overall satisfaction with the reconstructive procedure was high and 19/20 patients were generally satisfied with the procedure.

**Conclusions:** The importance of appropriate information cannot be sufficiently stressed. It is however as important to emphasize the need for psychological support given by an empathetic medical staff.

A specially trained nurse is now responsible for our patients, a written brochure has been made, support patients are available and a video showing patients' experiences has been produced.

**PP-3-11 Intra Operative Iridium versus External Beam Boost in Breast Conservation; Boost Volumes and Local Control**

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**Introduction:** To evaluate our method of intra operative Iridium boost (IB) in relation to external beam boost (EBB), all 280 patients treated with breast conserving therapy (BCT) from January 1987 through July 1995 were analyzed with emphasis on boost treatment volume and local control.

**Patients and methods:** BCT consisted of tumour excision, axillary clearance, 50 Gy whole breast irradiation and a boost of 15 Gy. External beam boost (EBB) was used in 100 patients. Iridium boost (IB) in 180, intra operatively in 77%. Poor prognostic signs were slightly more common in the IB group (age < 40: 17% vs 11%; pN<sup>+</sup> 27% vs 21%; Incomplete excision: 10% vs 4%; EIC+: 24% vs 18%; Vessel Invasion: 12% vs 6%). Mean boost treatment volume was 57 cm<sup>3</sup> (range 17–101 cm<sup>3</sup>) for IB and 177 cm<sup>3</sup> (range 45–715 cm<sup>3</sup>) for EBB.

**Results:** With a median follow up of 36 months, preliminary analysis showed six local recurrences (3.3%) in the Iridium group and eight (8.0%) in the external beam boost group. Taking into account only true recurrences

or marginal misses the above mentioned figures would be: 1.6% in the IB group and 6.0% in the EBB group.

**Discussion:** These preliminary results suggest that boost treatment with Iridium provides at least similar local control with much smaller boost treatment volumes, and despite the uneven distribution of known prognostic factors.

**PP-3-12 Angiosarcomas of the Breast after Radiation for Carcinoma: 3 New Cases from Institut G Roussy**

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Lately several cases of angiosarcoma of the breast have been reported with patients who had had a conservative treatment including radiation therapy for breast carcinoma. They raise the question whether radiation therapy may "induce" angiosarcoma in the irradiated breast. Since 1988 angiosarcoma of the breast has been diagnosed at Institut G Roussy in 3 patients who had undergone conservative surgery and radiation (45 Gy, with a boost of 15 Gy to the tumor bed) for carcinoma of the same breast 6.5 years, 4.5 years and 4 years before their angiosarcoma. By the French Cancer Centers' grading system, grade was III in 2 tumors, I in 1 tumor. Two patients died 14 and 19 months after a total mastectomy. The 3rd one has no evidence of disease 16 months after the diagnosis. From the 32 case histories available for study in the world literature angiosarcomas arising in a breast treated by radiation appear to evolve in a similar way to those arising in a till then healthy breast. To establish a causal relationship with radiation at least 20 well documented cases need to be compared to an estimated 200 tightly matched control patients treated by radiation after breast carcinoma, but with no evidence of angiosarcoma after a comparable follow-up time.

**PP-3-13 Lymphoedema after Primary Treatment for Breast Cancer in Elderly Women**

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Lymphoedema of the upper limb and impaired mobility of the shoulder are complications well known after treatment of breast cancer. These complications have been associated with the extent of surgery and postoperative radiotherapy (RT). The incidence of lymphoedema and impaired mobility was assessed in patients 70 years of age or more operated for breast cancer during 1992–94. The volume and the mobility of each arm were measured in 55 consecutive women. The measurements were made preoperatively and after one and two years of follow-up. 46 patients were eligible for follow-up. 30 patients were operated with modified radical mastectomy (MRM) according to Patey. 9 of these patients were given adjuvant RT to the chest wall and regional lymph nodes. 16 patients were operated with wide local excision and axillary clearance (BCT). 10 of these patients were given adjuvant RT to the remaining breast tissue.

**Results:** 10 patients are considered to have lymphoedema and 18 impaired mobility of the shoulder. 6/9 patients operated with MRM and given adjuvant RT develop lymphoedema and 8/9 impaired mobility of the shoulder whereas of the remaining patients not given RT only 1/21 develops lymphoedema and 6/21 impaired mobility. 2/10 patients operated with BCT and given adjuvant RT develop lymphoedema and 4 impaired mobility of the shoulder. Of the remaining patients not given RT to the breast 1/6 develop lymphoedema and none impaired mobility.

**Conclusion:** A significant difference in the incidence of lymphoedema and impaired mobility of the shoulder is demonstrated in patients given postoperative RT in any form compared with those having no RT. A very high incidence of lymphoedema is observed in patients operated with MRM and given adjuvant RT (67%), but also after treatment with BCT and postoperative RT to the breast the incidence of lymphoedema is not negligible (20%).

**PP-3-14 Local Recurrences (LR) after Radiosurgical Breast Conservative Treatment (BCT): Frequence, Risk Factors and Outcome**

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**Material:** From January 1980 to December 1988, 652 women were treated by BCT for a T0T1T2 ≤ 4 cm tumor. The median age was 51 years. According to TNM classification, we observed: T0: 14.3%, T1: 43%. T2: 35.4%, Tx: 7.3%.