Treatment: Qundrantectomy, lumpectomy and axillary dissection were performed respectively in 25, 75, 95% of the cases. All received whole breast irradiation at 46–50 Gy by cobalt photons with a boost of 10–14 Gy by electrons. Respectively 32% and 64% of the women received chemotherapy and a hormonal treatment.

Histology: Ductal infiltrating carcinoma was noted in 78.1% of cases; pure DCIS, 1 obular infiltrating carcinoma and other types in 6.9%, 8.6% and 6.4% respectively. The quality of the excision was good, doubtful or incomplete in 92.7, 5.7 and 1.6%. Auxiliary involvement and an in situ component were present in 25% and 41% of cases. PgR and ER were positive in 64% and 66% of cases.

Analysis of LR: With a 8 years median follow-up, 50 LR (7.7%) occurred, including 44 isolated, 4 with associated lymph nodal recurrence and two with metastases. Among these LR, 21 were true recurrences, 16 marginal recurrences and 13 occurred elsewhere in the breast. 12 LR occurred before 2 years, 24 from 2 to 5 years, and 14 after 5 years. 44 out of 50 LR were invasive and 6 intraductal. 44 women had salvage mastectomy, 4 had a new conservative treatment, and one chemotherapy only; five women had a new LR on the chest wall. 18 out of 50 (36%) women developed metastases and 13 died of BC (27%). The overall survival rates alter LR are 65% and 43% at 5 and 10 years respectively. The statistically significant risk factors of LR were: incomplete excision, age under 40 years, small size of the breast and total dose on the turnor bed less than 60 Gy. The clinical size, pN status, type of surgery and the histological subtype are without influence. Thus, the LR seems an unfavorable event in women treated by BCT. A close follow-up is necessary in the first years especially in young

PP-3-15

Is Axillary Dissection Necessary in Breast Cancer Conservative Treatment? An Historical Series

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Breast cancer is more and more diagnosed at a very early stage; currently, some are reconsidering the place of an axillary dissection for selected women. In order to better identify this group, we found interesting to review an historical series of 115 patients treated in our Institute from 1972 until 1986 with a lumpectomy followed by an irradiation of the breast, and the axillary and supraclavicular lymph nodes. The tumors were of relatively small size ($T_1-T_2<3.5\,\mathrm{cm.}$) and without palpable axillary node (N_0).

The rate of axillary recurrence is 8% over a 5 year period. This rate is significantly higher than the figures published for a classical treatment with an axillary dissection: axillary relapse rate is close to 0%.

The survival rate without relapse is 71% over a 10 year period. The overall survival rate at 5 and 10 years is respectively 88% and 78%.

The control of the disease by this technique turns out to be less effective for the prevention of local and systemic recurrences, even if general survival rate are similar to the published figures for the classical conservative treatment. Size cannot be considered as the single factor for selecting patients not requiring an axillary dissection.

PP-3-16

Conservative Treatment for Intraductal Carcinoma of the Breast with Surgery and Radiotherapy

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Purpose: To evaluate our experience in the conservative treatment of ductal carcinoma in situ of the breast (DCIS) and to determine the role of radiotherapy in this disease.

Patients and method: Between 1983 and 1993, 42 conservatively treated patients with DCIS (83% quadrantectomy) were referred to the Dept. of Radiation Oncology of Trento. Age ranged between 28 and 68 years (median 50 years), 24 patients were premenopausal. 38 cases were treated with postoperative radiotherapy with two opposed tangential fields of a CO⁶⁰ unit to a total dose of 48.6–50 Gy to the entire breast. All but 6 patients had a supplemental boost of 10 Gy with electron beam of 7–11 MeV.

Results: Median follow up was of 56 months (range 24–105 months). Two local recurrences occurred (crude rate of 5.2%). A metachronous tumor of the ovary was observed. An actuarial 5-year 100% overall and cause-

specific survival was found. Actuarial freedom from local recurrence was of

Conclusion: Our results confirm the favorable outcome of patients with DCIS of the breast treated with conservative surgery plus radiotherapy.

PP-3-17

Young Age and Breast Conservative Treatment

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Purpose: To asses the impact of young age in women with breast conservative treatment.

Methods and Materials: Medical records of 990 women with stage I and II breast cancer who were treated at our Institution from 01/1984 to 07/1995 have been analyzed. All women received conservative breast surgery, axillary dissection, and radiation therapy. 61 patients were younger than 36 years at the time of diagnosis (range 23–35). The considered end points were: local failures and distant metastases. The follow-up was from 9 months to 11 years. Two patients had positive margins. Seventeen patients had intraductal peritumoral component. All patients had a scar boost after breast irradiation. Thirty-one patients had adjuvant chemotherapy and one had primary chemotherapy. Only two patients had hormonotherapy.

Results: There have been three local recurrences and twelve distant metastases as first events in fourteen patients. In local failure patients survival rate has been 100% from the failure (follow-up from 24 to 54 months). In distant failure patients only 4 patients have died, therefore 66% are alive from the failure (follow-up from 2 to 27 months). One of these patients had distant metastases and contralateral tumour as first event, and died 7 months later. The mean age of failure has been 29.4 years. Relapses have been found mainly in patients younger than 31 years (71% of the total failures).

There has also been one patient who developed a second methacronous tumour (Ca. papillary of thyroid) twenty-seven months later, and she is alive with no evidence of any of both diseases.

Conclusions: Women with local failures have an increased risk of distant metastases without any effect on survival in our studied period. On the other hand our results differ from the published ones in order to consider 35 years as the limit of the high risk group in younger patients.

PP-3-18

Can Pretreatment Mammograms Predict Local Recurrence after Breast-Conserving Therapy?

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Introduction: Can characteristics of the pretreatment mammogram be used to predict the risk for local recurrence after breast-conserving therapy (BCT)?

Methods: A case-control study was performed within a cohort of 1040 breast cancer patients who received BCT during the period 1981–90. The preoperative mammograms of 39 patients with local recurrence in the breast after BCT (cases) and 126 patients without local recurrence (controls) were reviewed by one radiologist and scores were compared.

Results: Cases and controls differed significantly with respect to the proportion of mammographically occult tumours (33% versus 15%), tumours with a non-circumscribed margin (63% versus 24%), malignant calcifications within the tumour area (24% versus 5%), and multifocality in the tumour quadrant (33% versus 6%). Within the age group ≥ 50 years, cases had a much higher proportion of tumours with a non-circumscribed margin (66% versus 9%).

Conclusion: Our results indicate that preoperative mammograms may be useful in identifying poor candidates for breast-conserving therapy. Especially the patients ≥ 50 years with a mammographic lesion with a non-circumscribed margin were found to be at high risk for local recurrence.