

OUTCOME OF RADIOTHERAPY FOR PRIMARY OPERABLE INVASIVE BREAST CANCER AT A MEDICAL CENTER

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Purpose : To evaluate the treatment outcome of patients with primary operable invasive breast cancer who received radiotherapy at a medical center from 1988 to 2000.

Materials and Methods : We recruited 341 consecutive patients of primary operable invasive breast cancer who received radiotherapy in the department of radiation oncology of the authors' medical center from 1988 to 2000. A median dose of 50 Gy in 25 fractions was delivered to the chest wall and/or regional lymph nodes of patients who had received mastectomy. For those who had received breast-conserving surgery, another tumor boost dose of 15 to 20 Gy (total dose: 65 to 70 Gy) was given. Information on each patient was collected by reviewing the medical records, and clinical outcome was compared.

Results : The median follow-up time for the 341 patients was 2.6 years (range, 7 months to 13.1 years). Among them, 142 received breast-conserving surgery and 199 received mastectomy. Systemic chemotherapy was used on 264 patients (77%) as a neoadjuvant or adjuvant treatment. The local-control rate at 5 years was 90.5%. The disease-free survival at 5 years was 71.8%. The overall survival at 5 years was 81.4%. The disease-free survival and local control at 5 years by stage were 95.5% and 100% for stage I, 93.2% and 98% for stage IIA, 62.4% and 92.1% for stage IIB, 58.8% and 80.5% for stage IIIA, and 43.7% and 75.4% for stage IIIB, respectively. A total of 24 patients (7.1%) had locoregional recurrence, which occurred at 5 months to 5.5 years (median, 1.6 years). But for the 142 BCS patients, only one of them developed local recurrence till now (median, 2.1 years).

Conclusion : Radiotherapy is a very effective adjuvant treatment on local control in breast cancer patients. Survival and local recurrence rates were comparable to other series. Our results also showed a very low rate of recurrence for patients receiving breast-conserving surgery followed by radiotherapy.

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Key words: Radiotherapy, Breast neoplasms, Clinical Outcome