

Can axillary and supraclavicular radiotherapy be avoided after breast-conserving surgery and axillary dissection in women with multiple involved axillary nodes? Experience at the European Institute of Oncology

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ABSTRACT

Aims and background. Although some guidelines recommend adjuvant radiotherapy (RT) to the axilla and supraclavicular nodes if 4 or more axillary nodes are involved, the current practice at our Institute is not to irradiate the axilla but to perform complete axillary dissection in which all 3 Berg levels are removed. We performed a retrospective analysis of patients with 4 or more axillary nodes involved and sufficient follow-up to provide indications as to whether our current treatment is adequate.

Methods. We retrospectively analyzed 287 T1-T3 patients with a median follow-up of 5 years and 4 or more involved nodes treated by quadrantectomy and breast RT but no axillary RT; supraclavicular RT was given only when prognostic factors were unfavorable.

Results. A total of 170 (59.2%) patients did not receive supraclavicular RT, while 117 (40.8%) patients received supraclavicular irradiation. No patient received axillary RT. After a median follow-up of 5 years (range, 4-105 months), 4.7% had died and 13.5% had developed distant metastases in the no supraclavicular RT group, compared to 12.0% dead ($P = 0.028$ log rank) and 24.8% ($P = 0.201$ log rank) in the supraclavicular RT group. No patients with supraclavicular RT developed supraclavicular metastases compared to 4 in the no supraclavicular RT group. There were no axillary recurrences.

Conclusions. Complete axillary dissection appears adequate treatment in patients with 4 or more involved nodes. The low breast recurrence rate also suggests that breast conservation is adequate treatment in such patients. Supraclavicular RT appears to reduce the number of supraclavicular metastases but confers no survival advantage. Although a small number of cases were examined in this retrospective single-center series, all received highly uniform treatment.

Key words: breast cancer, axillary metastases, axillary radiotherapy, supraclavicular radiotherapy, axillary dissection.

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