Patterns and risk factors for locoregional failures after mastectomy for breast cancer: an International Breast Cancer Study Group report


BACKGROUND
Rates and risk factors of local, axillary and supraclavicular recurrences can guide patient selection and target for postmastectomy radiotherapy (PMRT).

PATIENTS AND METHODS
Local, axillary and supraclavicular recurrences were evaluated in 8106 patients enrolled in 13 randomized trials. Patients received chemotherapy and/or endocrine therapy and mastectomy without radiotherapy. Median follow-up was 15.2 years.

RESULTS
Ten-year cumulative incidence for chest wall recurrence of >15% was seen in patients aged <40 years (16.1%), with ≥4 positive nodes (16.5%) or 0-7 uninvolved nodes (15.1%); for supraclavicular failures >10%: ≥4 positive nodes (10.2%); for axillary failures of >5%: aged <40 years (5.1%), unknown primary tumor size (5.2%), 0-7 uninvolved nodes (5.2%). In patients with 1-3 positive nodes, 10-year cumulative incidence for chest wall recurrence of >15% were age <40, peritumoral vessel invasion or 0-7 uninvolved nodes. Age, number of positive nodes and number of uninvolved nodes were significant parameters for each locoregional relapse site.

CONCLUSION
PMRT to the chest wall and supraclavicular fossa is supported in patients with ≥4 positive nodes. With 1-3 positive nodes, chest wall PMRT may be considered in patients aged <40 years, with 0-7 uninvolved nodes or with vascular invasion. The findings do not support PMRT to the dissected axilla.