

Ovarian ablation in early breast cancer: overview of the randomised trials. Early Breast Cancer Trialists' Collaborative Group

[No authors listed]

Abstract

BACKGROUND:

Among women with early breast cancer, the effects of ovarian ablation on recurrence and death have been assessed by several randomised trials that now have long follow-up. In this report, the Early Breast Cancer Trialists' Collaborative Group present their third 5-yearly systematic overview (meta-analysis), now with 15 years' follow-up.

METHODS:

In 1995, information was sought on each patient in any randomised trial of ovarian ablation or suppression versus control that began before 1990. Data were obtained for 12 of the 13 studies that assessed ovarian ablation by irradiation or surgery, all of which began before 1980, but not for the four studies that assessed ovarian suppression by drugs, all of which began after 1985. Menopausal status was not consistently defined across trials; therefore, the main analyses are limited to women aged under 50 (rather than "premenopausal") when randomised. Oestrogen receptors were measured only in the trials of ablation plus cytotoxic chemotherapy versus the same chemotherapy alone.

FINDINGS:

Among 2102 women aged under 50 when randomised, most of whom would have been premenopausal at diagnosis, 1130 deaths and an additional 153 recurrences were reported. 15-year survival was highly significantly improved among those allocated ovarian ablation (52.4 vs 46.1%, 6.3 [SD 2.3] fewer deaths per 100 women, logrank 2p = 0.001), as was recurrence-free survival (45.0 vs 39.0%, 2p = 0.0007). The numbers of events were too small for any subgroup analyses to be reliable. The benefit was, however, significant both for those with ("node positive") and for those without ("node negative") axillary spread when diagnosed. In the trials of ablation plus cytotoxic chemotherapy versus the same chemotherapy alone, the benefit appeared smaller (even for women with oestrogen receptors detected on the primary tumour) than in the trials of ablation in the absence of chemotherapy (where the observed survival improvements were about six per 100 node-negative women and 12 per 100 node-positive women). Among 1354 women aged 50 or over when randomised, most of whom would have been perimenopausal or postmenopausal, there was only a nonsignificant improvement in survival and recurrence-free survival.

INTERPRETATION:

In women aged under 50 with early breast cancer, ablation of functioning ovaries significantly improves long-term survival, at least in the absence of chemotherapy. Further randomised evidence is needed on the additional effects of ovarian ablation in the presence of other adjuvant treatments, and to assess the relevance of hormone-receptor measurements.

Comment in

- [Lancet. 1996 Nov 2;348\(9036\):1184](#)