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Postoperative dose-dense sequential chemotherapy with epirubicin, followed by CMF with or without paclitaxel, in patients with high-risk operable breast cancer: a randomized phase III study conducted by the Hellenic Cooperative Oncology Group.

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Source

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Abstract

PURPOSE:

The aim of this study was to explore the effect of dose-dense sequential chemotherapy with or without paclitaxel primarily on disease-free survival (DFS) and secondarily on overall survival (OS) in patients with high-risk operable breast cancer.

PATIENTS AND METHODS:

From June 1997 until November 2000, 604 patients with T1-3N1M0 or T3N0M0 tumors were randomized to three cycles of epirubicin 110 mg/m2 followed by three cycles of paclitaxel 250 mg/m2 followed by three cycles of 'intensified' CMF (cyclophosphamide 840 mg/m2, methotrexate 47 mg/m2 and fluorouracil 840 mg/m2) (group A), or to four cycles of epirubicin followed by four cycles of CMF, as in group A (group B). All cycles were given every 2 weeks with granulocyte colony-stimulating factor support.

RESULTS:

A total of 595 patients were eligible. Median follow-up was 61.7 months for group A and 62 months for group B. The 3-year DFS was 80% in group A and 77% in group B. Survival rates were 93% and 90%, respectively. The effect of treatment on the hazard of death was different according to hormonal receptor status. More specifically, in patients with negative receptor status the hazard of death was significantly higher for group B (hazard ratio 2.42). Both regimens were well tolerated and severe acute side-effects were infrequent. No cases of severe cardiotoxicity or acute leukemia were recorded.

CONCLUSIONS:

The present study failed to demonstrate a significant difference in DFS or OS between the two treatment groups. However, our study has shown clearly that high-dose paclitaxel can be safely incorporated to dose-dense sequential chemotherapy.