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Metastatic breast cancer with liver metastases: a registry analysis of clinicopathologic, management and outcome characteristics of 500 women.

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Source

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Abstract

INTRODUCTION:

Breast cancer patients developing liver metastases have traditionally been considered to make up a poor prognosis group with median survival rates of less than 6 months. We retrospectively analysed clinicopathologic characteristics of 500 women with metastatic breast cancer and liver deposits upon administration of first-line chemotherapy in the 90s. We sought to examine the epidemiology, clinical course, outcome and prognostic factors of this cohort with the hope to identify changing patterns, facilitate cost-effective follow-up and rationalize therapy of these patients.

MATERIALS AND METHODS:

Among 1,426 metastatic breast cancer patients enrolled with the Hellenic Cooperative Oncology Group (HeCOG) chemotherapy registry from 1988 to 2004, 500 (35%) had liver deposits when first-line chemotherapy was administered and were the subject of this retrospective analysis. These patients had been treated with single-agent or combination chemotherapy either in the context of clinical trials or outside trials according to standard HeCOG protocols.

RESULTS:

Median age at diagnosis was 54.5 years, with the majority of women being fit (Performance Status PS 0-1 76%), postmenopausal (53%) harbouring hormone-receptor positive (54%) invasive ductal, lobular or mixed carcinomas (76%). High-grade tumours were present in 35% of patients, while the extent of systemic relapse was confined to the liver plus none or one additional organ site in 59% of women. Half of the patients had received adjuvant chemotherapy and two-thirds relapsed later than 12 months from initial diagnosis of localized disease. First-line palliative chemotherapy included an anthracycline and/or a taxane in 88% of cases with an objective response rate of 34% (95% Confidence Interval CI: 29.1-37.5), while 79% of patients were able to proceed to second-line chemotherapy based mostly on non-anthracycline non-taxane containing regimens with objective responses seen in 16% of them (95% CI: 11.6-21.9). At a median follow-up of 47.5 months, disease progression occurred solely in the liver in one-third of patients and median overall survival was 16.3 months, with projected 5-year survival of 8.5%. Type of palliative chemotherapy was not a predictive factor for response, though non-anthracycline non-taxane regimens were associated with lower tumour regression rates. Positive hormonal receptor status of the primary, low histological grade, malignant relapse in the liver only or liver plus one organ site and good performance status were significant prognostic factors for improved outcome in univariate analysis, the latter two retaining significance in multivariate analysis as well.

CONCLUSIONS:

In comparison to historical series, adjuvant therapy, stricter follow up and imaging technology advances result in earlier diagnosis of fitter breast cancer patients with low-volume hepatic and systemic relapse. Cost-effectiveness of close monitoring for early diagnosis of relapse should be further studied. With availability of effective modern chemotherapy, prolonged survival is feasible and aggressive multidisciplinary management of selected patients may be warranted.