

Does More Intense Palliative Treatment Improve Overall Survival in Metastatic Breast Cancer Patients?

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A retrospective review of 483 women who had metastatic breast cancer and were treated between 1942 and 1975 was carried out to examine the effects of improving and aggressive palliative modalities on patient survival. There was a steady increase in the proportion of patients treated by chemotherapy and/or hormonal ablative therapy. Additive hormonal therapy, irradiation, and surgery for palliation decreased in frequency during the same period. Survival time from the first recurrence did not appear to increase in these patients over the period of this study. In spite of increasingly sophisticated palliative therapies, the survival time of patients with metastasis did not appear to be significantly prolonged.

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THE PALLIATIVE MANAGEMENT of metastatic breast cancer patients with hormonal or chemotherapeutic modalities produces a significant disease remission in nearly one half of the treated patients.¹⁻³ The number of agents or modalities available has increased steadily over the last 30 years, and combination chemotherapy programs appear to increase the number of responders.¹ Although the prolongation of survival time in patients responding to these modalities is well-known,⁴ the impact of more sophisticated and aggressive palliative treatments on overall patient survival has not been established. Several investigators have observed a lack of continued improvement or marginal improvement in overall survival with the current therapeutic approaches to metastatic breast cancer.⁵⁻⁷ Furthermore, there might have been shortened survival in some patients given chemotherapy.⁶ Ross *et al.*⁸ noted the significantly improved survival over the years, particularly with the use of combination chemotherapy.

The current study examined the effect of improving methods of palliative treatment on the survival of patients treated at Roswell Park Memorial Institute between 1942 and 1975. All patients diagnosed as having breast cancer were treated by one department since the 1940s, and long-

term follow-up data are available for these patients, thus providing a unique opportunity to evaluate the relationship between the changing palliative treatment modalities and their impact on the survival of patients with breast cancer.

Materials and Methods

Included in this retrospective review of the period between 1942 and 1975 were 483 patients with metastatic breast cancer. The patients' charts were reviewed by year of death, resulting in subgroups of at least 40 patients in each 5-year period by the year of first recurrence (with the exception of the years before 1950, during which period there were 14 patients). Only those patients who met the following criteria were included in this analysis: (1) age younger than 75 years; (2) overall survival period of less than 120 months; (3) therapy for metastatic breast cancer of at least 6 months' duration; and (4) cause of death identified as metastatic breast cancer. Patients ranged in age from 24 to 74 years, with a median age in the early 50s in each period studied (Table 1). The large number of patients included in the group from 1961 through 1965 occurred by chance, in part because during those years a larger number of patients were admitted and died in the hospital, and in part because patients were classified in this study according to their year of first recurrence.

For this analysis, patients were divided into six groups according to the year of first recurrence. The survival time was calculated from diagnosis to death (overall) and from first recurrence to death (metastatic). The survival of these patients was calculated by the method of Kaplan and Meier.⁹ Hormonal treatment included additive, ablative

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