

Estrogen replacement therapy in women with previous breast cancer

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OBJECTIVE: We sought to review the status of patients with breast cancer who were treated with estrogen replacement therapy and compare the results with those of nonestrogenic hormone users and women not treated with hormone replacement.

STUDY DESIGN: The study group consisted of 76 patients with breast cancer, including 50 using estrogen replacement for up to 32 years, 8 using nonestrogenic hormone replacement for up to 6 years and followed for up to 11 years, and 18 using no hormones for up to 10 years. In addition to estrogen use, 40 of the 50 hormone users were treated with androgens, usually in the form of implantation of testosterone pellets. Forty-five subjects were also given progestogens, usually megestrol acetate 20 to 40 mg for 10 to 25 days each month. The 8 nonestrogen hormone users were treated with various combinations of testosterone pellets, tamoxifen, and progestogens. Forty-two of the 50 estrogen users are still being treated in our clinic, as are 2 of the 8 subjects using nonestrogen hormone. Follow-up was done through the tumor registry at University Hospital, and those whose tumor records were not current were telephoned.

RESULTS: Of the 50 estrogen users, 3 have died (a mortality rate of 6%), and the rest have been followed for 6 months to 32 years, with a mean duration of follow-up of 83.3 ± 8.81 months. One of the 8 nonestrogen hormone users has died (a mortality rate of 12.5%), and the rest have been followed for 2 to 11 years, with a mean duration of follow-up of 72.0 ± 5.93 months. Six of the 18 women not using hormone replacement have died (a mortality rate of 33.3%), and the rest have been followed for 6 months to 10 years, with a mean duration of follow-up of 50.5 ± 6.01 months.

CONCLUSION: Estrogen replacement therapy apparently does not increase either recurrences or mortality rates. Adding progestogens may even decrease recurrences. Women with early breast cancer should be offered hormone replacement therapy after a full explanation of the benefits, risks, and controversies. (*Am J Obstet Gynecol* 1999;181:288-95.)

Key words: Breast cancer, hormone replacement therapy, estrogen, progestogen

Breast cancer is the most common malignancy in the United States, composing 29% of all female cancers and 16% of all female cancer deaths.¹ In 1999, it is expected that 176,300 new cases of breast cancer will be diagnosed, and 43,300 women will die of this disease. Carcinoma of the breast will develop in 1 of every 8 women in their lifetime if they live to be 85 years old. The good news is that the number of new cases is decreasing, down from 184,300 new cases in 1996, and the even better news is that the number of deaths has declined from 46,000 in 1995. This could be attributable to public awareness, increasing use of mammography, and regular examinations. The mortality rate from breast cancer in the United States is 21.1 per 100,000 women, which ranks

15th in the world. The frequency of breast cancer increases continuously in the female life span.

It is assumed that estrogens promote carcinoma of the breast, hasten recurrences, and cause metastases. However, there are no direct data to indicate that estrogen replacement therapy (ERT) will worsen the prognosis of this malignancy. Premenopausal women in whom breast cancer develops continue to produce endogenous estrogen for many years yet are denied ERT when they reach menopause.² Many breast cancers are diagnosed early, and women survive the tumor only to die of heart disease or osteoporotic fractures. There have been several studies published recently regarding the use of ERT after diagnosis of breast cancer to treat postmenopausal symptoms and protect against osteoporosis and heart disease.³⁻¹⁰ This is a report of 76 patients with breast cancer, 50 of whom have been followed in our clinic and treated with ERT for many years.

Material and methods

The study group consisted of 76 patients ranging in age from 34 to 83 years who were diagnosed with breast

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