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COMPARING RADICAL MASTECTOMY WITH QUADRANTECTOMY, AXILLARY DISSECTION, AND RADIOTHERAPY IN PATIENTS WITH SMALL CANCERS OF THE BREAST

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Abstract From 1973 to 1980, we carried out a controlled study at the National Cancer Institute in Milan to consider the value of a conservative procedure in patients with breast cancer of small size. We randomized 701 patients with breast cancer measuring less than 2 cm in diameter and with no palpable axillary lymph nodes to Halsted radical mastectomy or to "quadrantectomy" with axillary dissection and radiotherapy to the ipsilateral residual breast tissue. We treated 349 patients with Halsted mastectomy and 352 with quadrantectomy. The two groups

were comparable in age distribution, size and site of primary tumor, menopausal status, and frequency of axillary metastases. There were three local recurrences in the Halsted group and one in the quadrantectomy group. Actuarial curves showed no difference between the two groups in disease-free or overall survival. From these results, mastectomy appears to involve unnecessary mutilation in patients with breast cancer of less than 2 cm and no palpable axillary nodes. (*N Engl J Med*. 1981; 305:6-11.)

HALSTED radical mastectomy has been the treatment of choice for nearly 100 years in the management of breast cancer. Later modifications, such as the additional dissection of internal mammary nodes, have been gradually abandoned, whereas less mutilating procedures preserving the pectoral muscles have progressively gained favor.

Few advances have been made in the direction of conservative procedures that would save a major por-

tion of the breast. Although reports scattered over the past 20 years and based mainly on small series have shown promising results, controlled clinical studies have been few and inconclusive.

The purpose of this paper is to report the results of a randomized, controlled study in which the classic Halsted mastectomy was compared with a conservative procedure consisting of the resection of a breast quadrant, dissection of axillary lymph nodes, and radiotherapy.

PATIENTS AND METHODS

The trial was started in June 1973 at the National Cancer Institute in Milan.

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