

Prognosis of Node Positive Breast Cancer

Masao TOMITA, Hiroyoshi AYABE, Katsunobu KAWAHARA
Yutaka TAGAWA, Shinsuke HARA, Hioharu TSUJI
and Tadayuki OKA

*The First Department of Surgery,
Nagasaki University School of Medicine*

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ABSTRACT: The prognosis of 63 patients with breast cancer was evaluated from the standpoint of node metastasis. In this series, the number and the location of involved node failed to assess precisely in association with the prognosis of patients with breast cancer.

Axillary node metastasis (Ax(+)) as well as parasternal node metastasis (ps(+)) was one of the most influential factors on the prognosis. However, it is emphasized that ps(+) dose not indicate the detrimental sign as far as dissection would be performed.

INTRODUCTION

It is generally accepted that the outcome of surgical treatment is relatively fair when compared with that of carcinomas of other organs.

In addition, it is believed that the survival time of surgical treatment in patients with breast cancer closely correlates with a presence of nodal involvement.

In this study, the most influential factors on the prognosis for breast cancer are evaluated in analysis of the survival rates according to TNM classification on the basis of a result of clinical experience with surgical treatments.

PATIENTS

During the past 10 years from 1971 to 1980, 63 patients with breast cancer were operated upon at the First Department of Surgery, Nagasaki University School of Medicine. Pre-operative diagnosis was confirmed by means of aspiration needle biopsy or excisional biopsy among suspicious patients of breast cancer on palpation in combination with the findings of

mammography and echography.

According to TNM classification, eight patients belonged to Stage I, 42 were Stage II, eight were Stage IIIA and five were Stage IIIB, respectively. On the other hand, according to surgical stages, 31 patients belonged to stage I, 20 were stage II, eight were stage III and five were stage IV respectively.

A major discrepancy between TNM and tmn-stages was probably due to the fact that palpable node swelling was not consistent with histologic node metastasis.

In this series, positive node metastasis in the axilla was confirmed in 26 patients whereas negative node metastasis was seen in 38 patients.

The survival times were compared between the patients with and without axillar node metastasis.

Nine patients with PS(+) patients included in this study, eight patients out of whom had the tumor mass situated inside the breast (A and B area) and the other one had the tumor located in the center of the breast (A, E and C).

The survival times in patient with PS(+) were also compared with those in patients with ps(-).

RESULTS

Figure 1 showed the survival time following surgery according to TNM classification. The survival times in stage I patients were almost the same as those in stage II.

However, the survival times in stage IIIA and IIIB patients were apparently shortened as compared with those in stage I and II, although those between stage IIIa and IIIB were almost similar.

On the other hand, according to tnm stage as shown in Figure 2, the survival times in stage

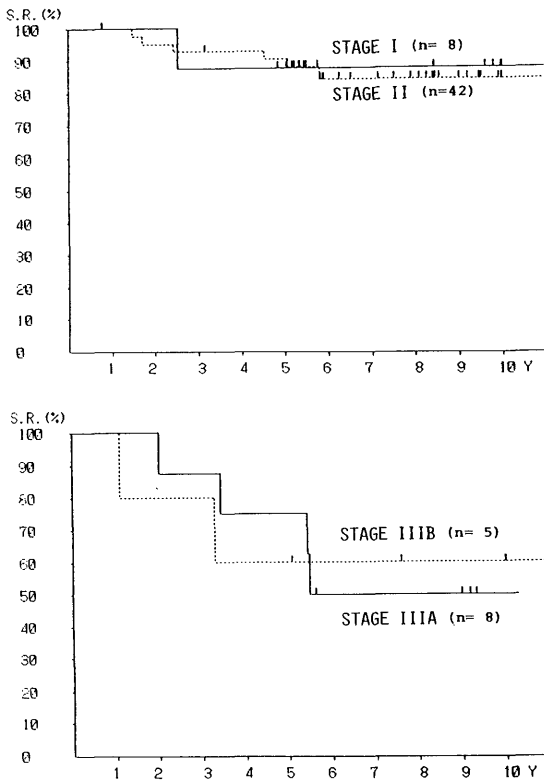


Fig. 1. Survival rates according to TNM-stage

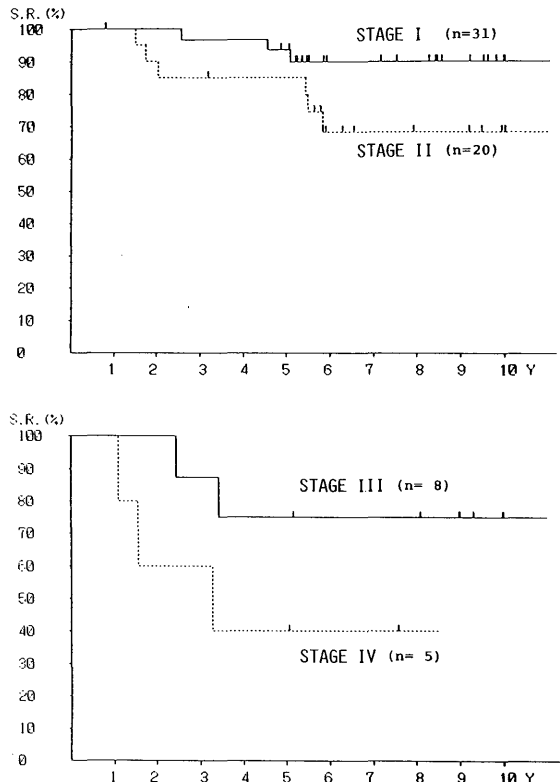


Fig. 2. Survival rates according to Tnm-stage

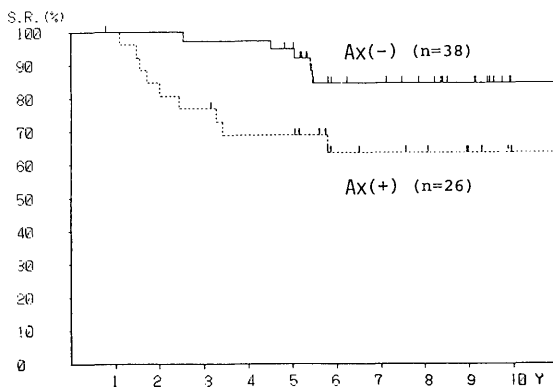


Fig. 3. Survival rates according to axillary lymph nodes involvement

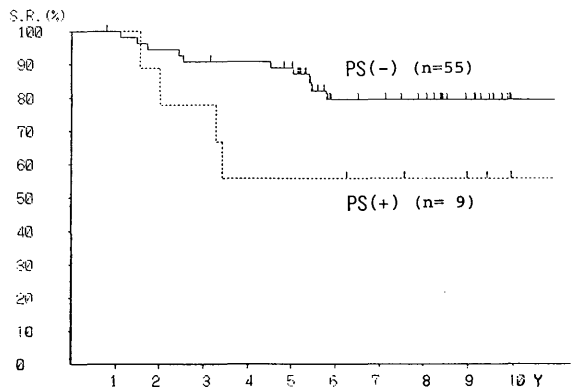


Fig. 4. Survival rates according to parasternal lymph nodes involvement

I patients were apparently satisfactory as compared with those in stage II patients.

On the other hand, the survival times in stage II patients resembled closely those in the stage III patients. Those in stage IV patients were obviously inferior to those in stage III.

Furthermore, the survival time in Ax(+) patients were compared with Ax(-) patients. These were apparently different as shown in **Figure 3**. Nodal involvement of the axillar region was closely correlated with the survival times following surgery.

Positive nodes in the axillar region showed that the survival curve rapidly declined two years following surgery and there was indicating a significant variation in the survival curves between Ax(+) and Ax(-) patients.

When compared between PS(-) and PS(+) patients, the survival curves were almost similar with those of Ax(+) and Ax(-) patients as shown in **Figure 4**.

It was confirmed that ps(+) did not necessarily imply poor outcome that was analogous to the result in Ax(+) patients.

DISCUSSION

There would be much debate on the question of influential factors of nodal involvement on the survival times.

Controversy exists concerning the therapeutic significance of nodal involvement of the axillar and the parasternal regions^{1, 2)}.

However, some investigators^{3, 4)} indicated that the survival times were more likely to relate to the number and the location of involved nodes. It is not easy to precisely determine a presence of nodal involvement even though histologic examination had been performed. It is emphasized that the availability of monoclonal antibody and/or immunohistochemical method is indispensable for determination of node metastasis⁵⁾. In addition, it is often confirmed that even a presence of node metastasis, which fails to be certified by conventional histologic examination is defined by the use of monoclonal antibody or immunohistochemical staining.

Adair⁶⁾ reported that axillary node metastasis was the most influential factor on the prognosis of patients with breast cancer, more than the

sizes of the tumors. They investigated the prognosis of 1458 patients with breast cancer in a 30-year follow up period. Pertinent controversial issues still remain unsolved, for example, which is the most influential factor on the prognosis, the number of involved nodes or the locations^{3, 4)}.

It is accepted that the prognosis of patients with node metastases less than three is much more fair than that of those with node metastases more than four.

Veronesi *et al*³⁾ emphasized that it is necessary to divide the location of involved nodes into the three parts on the basis of the site of the minor pectoral muscle. Berg⁷⁾ also reported that assessment of the prognosis of patients with breast cancer should be made with respect of the sizes and the locations of involved nodes. On the other hand, Smith⁸⁾ clarified that there was no significant difference in the survival time between the locations of involved nodes when the number of involved node was equivalent.

Veronesi³⁾ *et al* pointed out that a presence of involved node in the parasternal region affects highly the prognosis of patients with breast cancer.

In this series, ps(+) is a similar significance of the prognosis of patients with breast cancer with Ax(+). As reported by Noguchi⁹⁾, confirmation of ps(+) should be performed by parasternal node biopsy in the first and the second intercostal spaces to avoid overlooking a presence of parasternal node metastasis.

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