

Breast Surgery

Introduction

In our division, operable breast cancer patients are managed with multi-disciplinary approach. Early breast cancer patients underwent breast surgery and sentinel node biopsy (SNB). Advanced breast cancer patients were treated with primary chemotherapy and followed by breast and axilla surgery. Since the opening of the National Cancer Center Hospital East in July 1992, about 2000 cases of primary breast cancer patients have been operated.

Routine Activities

Two hundred fifty-four cases were operated in 2003. After a feasibility study on SNB followed by axillary lymph node dissection (ALND) in 200 cases of breast cancer, we continue to investigate SNB alone in patients with histologically sentinel node-negative [pN0(sn)] breast cancer since 1999. SNB is being examined in practice with vital blue dye (indigocarmine) or combined method of the dye and radiopharmaceuticals. As of the end of 2003, four hundred fifty patients underwent SNB alone without ALND. Five of them (1%) with pN0(sn) had relapsed in axilla lymph nodes. Three patients who had no other distant metastasis had delayed ALND, and have been relapse-free for 3 years. Anyway, SNB will become a standard care of axilla for early breast cancer patients instead of the standard procedure ALND. In this year, modified radical mastectomy was performed in 54 cases, partial mastectomy with ALND in 64 cases, simple or partial mastectomy with SNB alone in 132 cases, and excisional biopsy or others in 4 cases (Table 1). Finally, 70% of cases underwent breast-conserving surgery.

Adjuvant therapies for high-risk breast cancer patients received chemotherapy and hormonal therapy to prolong relapse-free survival and overall survival. Form the statistics at our division, 7-year relapse-

free survival and overall survival rates were similar to those reported from other centers (Table 2). Adjuvant poly-chemotherapy given intravenously is recommended for node-negative high-risk, or node-positive breast cancer patients. In addition, primary chemo-hormonal therapies are one of the promising strategies for early and advanced breast cancer. Primary chemotherapy combined with anthracycline and taxan for advanced breast cancer patients is applied in practice.

Research Activities

An international randomized clinical study of primary hormonal therapy (PROACT) is underway. The aim of this study is to compare tumor regression of an aromatase inhibitor, anastrozole, with that of tamoxifen, for postmenopausal breast cancer patients with positive hormonal receptor. Anastrozole is one of the promising aromatase inhibitors to block estrogen synthesis. Surgical treatment was done after primary hormonal therapy for 3 months, and the same hormonal therapy is continued for 5 years. N-SAS-BC02 is ongoing to compare anthracycline with taxan for the first-line adjuvant chemotherapy in node-positive breast cancer patients. N-SAS-BC03 is started for postmenopausal receptor-positive breast cancer patients. Standard adjuvant hormonal therapy, tamoxifen for 5 years, is compared with tamoxifen followed by anastrozole for total 5 years.

New Developments

SNB is a less invasive surgery to prevent arm morbidity following ALND for sentinel node-negative breast cancer patients. We are investigating our patients treated with SNB alone to evaluate prognosis and clinical benefits during the long-term period.

● S.Imoto ●

Number of Cases of Operable Breast Cancer

Operation	No. of cases(%)	
Modified radical mastectomy	54	(21)
PM + ALND	64	(25)
SM + SNB	19	(7)
PM + SNB	113	(44)
Other	4	(2)

ALND, axillary lymph node dissection; PM, partial mastectomy; SNB, sentinel node biopsy; SM, simple mastectomy.

Relapse-free Survival (RFS) and Overall Survival (OS) Rates at 7 Years in Breast Cancer Patients Treated between 1992 and 1997

No. of nodal metastases (No. of cases)	RFS(%)	OS (%)
0 (396)	89	95
1 to 3 (161)	75	87
4 to 9 (65)	51	74
10 or more (63)	41	49