

and those that had a conventional BCS. In the EABS group, 23 patients underwent BCS and 10 underwent a skin-sparing total mastectomy. Six out of 10 patients had a nipple areola complex sparing mastectomy. Seven patients underwent axillary dissection under endoscopic assistance. Thirteen patients had immediate mesh replacement. A total mastectomy was performed due to positive margins on the final biopsy report in one patient. The wounds healed without noticeable scarring. Among 82% of the evaluated cases there was good to excellent results. There was a significant difference in the wound scar ($p = 0.034$) and patient satisfaction ($p = 0.012$) with the cosmetic outcome. Almost all patients were satisfied with the outcome of surgery.

Conclusion: EABS was effective for patients with breast cancer and can be regarded as a surgical option with better aesthetic results; it can be performed via a small and remote wound that becomes inconspicuous after surgery. However, further study with more patients and long-term follow-up is needed.

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Poster

The factors influencing axillary lymph node metastasis in patients with T1 invasive ductal carcinoma

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Background: Due to the increment of general interest in breast cancer and the early screening examination, the rate of early breast cancer diagnosis has been relatively increasing. Even at the early stage of breast cancer, the state of axillary lymph node metastasis plays a significant role in treatment and prognosis of the cancer. Therefore, the aim of this study is to identify the state of axillary lymph node invasion and factors influencing the lymph node metastasis among the patients with T1 sized breast cancer.

Materials and Methods: From January 2003 to May 2008, 204 patients diagnosed as infiltrating ductal carcinoma after the breast cancer resection at Gachon University Gil Hospital were enrolled in this study. Age, size and location of cancer, number of tumor, tissue and nucleus grade, lymph vessel infiltration, immunohistochemistry test results such as ER, PR, p53, HER2, Ki67, and state of axillary lymph node metastasis were compared.

Results: Out of 204 patients, 10 patients had cancer size smaller than 0.5 cm (T1a), 22 patients had cancer sized between 0.5 cm and 1 cm (T1b), and 172 patients had cancer size larger than 1 cm (T1c). In regard to the rate of axillary lymph node metastasis, 1/10 (10%), 2/22 (9.1%), and 54/172 (31.3%) patients showed axillary lymph node metastasis in T1a, T1b, and T1c group respectively. Difference of axillary lymph node metastasis among T1a, T1b, and T1c group was statistically significant ($p = 0.039$). The number of tumor was sorted as 1, 2, and more than 3, and each group consisted of 179, 17, and 8 patients respectively. The rate of axillary lymph node metastasis according to the number of tumor was 48/179 (26.8%) in 1 tumor group, 5/17 (29.4%) in 2 tumors group, and 4/8 (50%) in more than 3 tumors group. Their difference was also statistically significant ($p = 0.007$). Furthermore, lymphovascular invasion was statistically significant in patients with axillary lymph node metastasis ($p = 0.000$). In the mean time, we could confirm the result of preoperative axillary ultrasonography in 169 cases. Sensitivity, Specificity, Positive predictive value, Negative predictive value and Accuracy were 48.9%, 86.3%, 56.4%, 82.3%, and 76.3% respectively. The rate of axillary lymph node metastasis did not show the statistical significance in respect of the age of patient, location of cancer, tissue and nucleus class, and immunohistochemistry test result.

Conclusions: We found that size and number of tumor, and lymph vessel infiltration are the significant factors influencing axillary lymph node metastasis of the T1 invasive ductal carcinoma. Furthermore, we expect that size and number of tumor, and state of axillary lymph node in preoperative ultrasonography will provide helpful information at choosing whether to use the axillary lymph node dissection or the sentinel lymph node biopsy.

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Poster

True recurrences and new primary tumours have different clinical features in invasive breast cancer patients with ipsilateral breast tumour relapse after breast-conserving treatment

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Background: Ipsilateral breast tumor relapse (IBTR) after breast-conserving treatment (BCT) may represent two distinct types of lesion,

including a true recurrence (TR) or a new primary tumor (NPT). The aim of this study was to ascertain the difference between TRs and NPTs and to show the clinical significance of classifying IBTR into these two types of recurrence.

Materials and Methods: Patients ($n = 2,075$) with unilateral invasive breast cancer who underwent BCT between 1987 and 2005 at Saitama Cancer Center were analyzed. IBTR was classified into TR and NPT, which was based on all clinical and pathological features of both a primary tumor and IBTR that can be evaluated. IBTR-free survival and the risk factors were analyzed in order to compare the findings for TR and NPT. In addition, the salvage surgical methods for IBTR and overall survival after IBTR were analyzed.

Results: Sixty patients with IBTR were classified into 52 with TR and 8 with NPT. IBTR-free survival was significantly shorter in the patients with TR than those with NPT. Young age, tumor size, a positive surgical margin and omission of radiation therapy were significant risk factors for TR. Omission of radiation therapy was the only significant risk factor for NPT. In 27 patients who underwent a repeat lumpectomy for TR, four had a second IBTR.

Conclusions: The overall survival after IBTR was worse in patients with TR than NPT. TR and NPT show quite different clinical features. Classifying IBTR into TR or NPT can therefore help to select the most appropriate treatment for IBTR.

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Poster

What is a suitable method for immediate reconstruction after partial mastectomy in Korean woman with small or medium sized breast?

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Background: Breast conserving surgery has become increasingly popular. However, it is difficult for many patients to maintain breast shape and similarity. Most Korean women with A- and B-cup breast sized breast have defects and asymmetry after partial mastectomy. Oncoplastic surgery is a relatively new but increasingly used technique in the breast surgery. The absorbable mesh insertion technique following breast conserving surgery (BCS) has been used recently in Korea and Japan, which is easy and time-saving method. This study described the comparison of the cosmetic outcomes between the oncoplastic technique and the mesh insertion technique for Korean woman with small or medium sized breast.

Material and Methods: We tried to apply oncoplastic mammoplasty in 16 patients and insert absorbable Vicryl Mesh[®] in 29 patients after BCS. 14 of 16 mammoplasty were performed parenchymal rearrangement and 2 were performed latissimus dorsi myocutaneous flap after BCS. 29 cases were inserted absorbable mesh wrapped by absorbable adhesion barrier Interceed[®] into the defect after BCS. The cosmetic outcome was compared between the two techniques.

Results: The cosmetic outcomes for the oncoplastic mammoplasty were excellent in 9, good in 4 and fair in one. The cosmetic results for absorbable mesh insertion technique were excellent in 2, good in 15, fair in 8 and poor in 4. Absorbable mesh insertion had many adverse effects such as erythema, seroma, contracture, and chronic pain. Two cases of mesh insertion had to undergo reoperation because of severe contracture and pain. There was no adverse effect after oncoplastic mammoplasty.

Conclusions: Parenchymal rearrangement with the volume displacement after BCS showed satisfactory cosmetic outcomes for most Korean woman with small or medium sized breasts and the volume replacement with mesh insertion showed acceptable outcomes for some Korean women.

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Poster

Autologous fat graft after breast cancer: Is it safe? – a single surgeon experience with 194 procedures

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Background: Fat grafting is a current plastic surgery technique and its use has been applied in breast surgery, specially in correction of defects due to breast conservative surgery (BCS) and breast reconstruction for cancer. The efficacy of this procedure was improved with Coleman's technique, but it is still controversial. There is lack of data about the safety of this procedure in such patients. **Objectives:** To determine the efficacy, the oncological safety of this procedure and the incidence of mammographic lesions that could be attributable to this procedure.

Material and Methods: One hundred and fifty-eight patients that underwent 194 breast fat grafting procedures were studied. All patients were previously submitted to a breast cancer surgery. Fat grafting technique used was the Coleman's technique and performed by a single surgeon. Patients were followed up with clinical and radiological examination.