The majority of the patients under 35 years, estrogen and progesterone receptor status were negative (55.6%), where the majority of the patients over 35 years were estrogen and progesterone receptor positive (55.5%) (p = 0.035).

Visceral metastases were more common in the under 35 years 50% versus 33.5% in patients above 35 years (p = 0.001).

Overall survival rate in very young age at 1, 2 and 5 years was 91.6%, 86.5% and 68.5% respectively, while Overall survival rate in patients above 35 years at 1, 2 and 5 years was 96%, 90% and 80.5% respectively (p = 0.04).

Overall recurrence rate at 1, 2 and 5 years and survival rate was better in node negative patients than node positive patients, p = 0.0001.

Overall recurrence rate at 1, 2 and 5 years and survival rate was better in estrogen positive patients than in estrogen negative patients, p = 0.0001.

Conclusion: women less than thirty five have a poor prognosis despite a similar stage and grade to older women. These women have more estrogen and progesterone negative tumors (p = 0.035) and have greater tendency to develop visceral metastases than older women.

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Management of mastalgia by low level laser therapy

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Background: Many women are suffering from breast pain around the world. Mastalgia due to mastopathy is usually just followed without medication. Some patients are given nonsteroidal anti-inflammatory drugs or anti-estrogen drugs. We investigated the efficacy and safety of diode laser therapy without medication for women who have inveterate breast pain.

Materials and Methods: After approval of the ethics committee of Tokyo Medical University Hospital, 20 women (17 Japanese, 1 Russian, 1 Korean, 1 Filipino), median age is 45 years (range, 23 to 80 years) were treated for mastalgia with low-level laser therapy (LLLT) by Diode laser (the Medilaser Soft 1000®) from November 2006. After putting on glasses, 10 sites in each breast, identified by the patient with her finger as painful points, were irradiated while touching the skin for 30 seconds each. all irradiation was done by doctors.

The effect of this treatment was evaluated using the Brief Pain Index (BPI) questionnaire before and after irradiation, which is scored on a 10-point scale. Further morphologic analysis was performed using ultra-sound (US) and magnetic resonance imaging (MRI).

Results: After laser irradiation, the BPI score decreased an average of 4 points, and reached 2 points or less in 13 women. In 5 women pain completely disappeared after irradiation. In some cases breast pain disappeared immediately after irradiation. No cases had increases in BPI or adverse events after LLLT. No changes were seen before and after irradiation on US or MRI.

Conclusions: To the best of our knowledge, There is no paper about LLLT for mastalgia.

Contrary to our expectations, in this study, mastalgia was not associated with morphologic changes.

From during irradiation, many patients expressed the feeling of a little warmth. This fact suggests the improvement of local blood flow by LLLT.

The results of this study suggest that LLLT for breast pain is effective (85%) and safe (100%), and that breast pain is not associated with morphologic changes. The mechanism, however, is still unknown.

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Rate of remnant tumour after excisional biopsy of breast mass with ultrasound-guided vacuum-assisted biopsy device

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Background: This study was aimed to evaluate the rate of remnant tumor after ultrasound-guided mammotome biopsy for breast mass and to evaluate the efficacy of mammotome biopsy device.

Materials and Methods: Analyze retrospectively 474 women (age 17−75 years) who were underwent ultrasound-guided, vacuum-assisted biopsy device (mammotome) biopsy from January 2003 to December 2006 in Chosun University Hospital in South Korea. After Mammotome biopsy, all patients were underwent ultrasonography for follow-up of remnant tumor.

Results: Remnant tumor was found in 39 patients (4.9%, mean age 40.9, range 17−64) of total 474 patients underwent Ultrasound-guided mammotome biopsy. Pathologic diagnosis were fibrocystic disease in 17 patients and fibroadenoma in 20 patients. Mean size was 1.17 cm before mammotome biopsy.

Conclusions: Ultrasound-guided, vacuum-assisted biopsy device (mammotome) biopsy was an effective method for small breast mass. Although there was a possibility of remnant tumor, the remnant rate was low. Also, there was advantage of cosmetic effect for small incision scar. The results suggested that mammotome biopsy is a good alternative method for the diagnosis of small breast mass.

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Triple negative breast cancer: our experience during the last five years (2002–2007)

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Background: Triple negative breast cancer is not very common expecially in Europe. This special type of breast cancer has very poor prognosis and his therapeutic approach has become a major problem. The purpose of our study is to analyse our experience during the last five years. Our clinic is a breast unit and we have more than 500 new cases of breast cancer per year.

Patients and Methods: During the last five years we have operated 76 patients with triple negative breast cancer (ER-PR-C-erb-B2 negative) and two patients had core biopsy and preoperative chemotherapy. The mean age of the patients was 59.41±10.5. 36 patients had quadrectomy and axillary node desection and 30 patients had mastectomy with axillary node desection. The tumor size was <2 cm in 30 patients, >2 cm and <5 cm in 19 patients, >5 cm in 27 patients. 17 patients had multifocal breast cancer. 29 patients were node negative, 14 had <3 positive lymph node and 33 had >3 positive lymph node. The histological type was invasive ductal carcinoma in 67 patients, 5 medullary carcinoma, 3 mucinous, 2 invasive lobular carcinoma and 1 patient had DCIS. All the patients had chemotherapy and radiotherapy after the surgical treatment.

Results: 14 patients had distant metastases, 6 during the first year of their follow-up and 8 during the second year and 5 patients died during the first two years of their follow-up. From the 73 patients who they are alive 29 patients are in follow-up for less than one year, 10 patients for >2 years, 12 patients for >3 years and 22 patients for >4 years. The percentage of early distant metastases and death in our study is 17.5% and 6.4%.

Conclusions: Triple negative breast cancer is a special subgroup of breast cancer patients with poor prognosis as they have high percentage of early distant metastases and death. The therapeutic approach is very difficult as is a high risk cancer that lacks the benefit of specific therapy that target these proteins (ER-PR-c-erb-B2). The second step of this trial is to measure biological markers in an effort to find factors who can be the target of specific therapies.These results will be presented shortly.

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Ductal lavage: a new perspective for the early diagnosis of breast cancer

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Background: Breast cancer is the most frequent cause of death among the women. Ductal lavage is a simple tecnhique which can detect cells from the last duct lobe unit the place that arrives first the breast cancer.

Patients and methods: 85 patients are enrolled. 59 had positive family history or Gail Risk >1.7, 1 had breast cancer on the other breast, 20 had nipple excretion and 5 patients had clinical picture of cancer. In these five the technique was held one day before the operation. The mean age was 45±10.07 years. After local aneasthetic ointment we inserted a small catheter into the nipple and after massaging the breast we infused 10−20 cc of Ringer Lactated solution and the lactic duct cells are being lavaged. The material from the lavage was examined cytological with thin-prep method. All the patients had mammography or breast ultrasound.

Results: One patient had suspicion of papillary carcinoma in the cytological examination of lavage and 12 had atypia (1: marked atypia, 4: moderate atypia, 7: mild atypia-15.3% of all the patients and 21.7% of those who had family history or Gail Risk >1.7). The 5 patients with clinical picture of carcinoma had positive lavage for malignant cells and they had surgical treatment as it was planned. The patient with marked atypia had an open biopsy as there was a dysplastic area behind the nipple in mammography. The histological examination was negative for malignancy. The other patient with the suspicion of papillary carcinoma had an MRI which was negative and she will be examined with ductal lavage in 3 months. The patients are under close supervision in our department (physical examination every six months).