

Material and Methods: Cross-sectional study, prospective, nonrandomized. Between the period 2008 to 2009, evaluated 79 female patients, those with LABC, included in a research protocol for specific treatment NC at HOSPITAL DE CANCER BARRETOS. We evaluated the variables related to breast imaging studies, measures tumor (dermatography) and the distance between the tumor and the skin, which were related by correlation analysis, with the gold standard values of the pathological anatomy. An analysis with descriptive purpose of evaluating the different points between the measures was also made.

Results: We evaluated 79 patients, excluded from the protocol 40 (50.6%), 16 remain under treatment and 23 completed chemotherapy and underwent surgery. The average size of tumors was 8.4 cm (4–17). The clinical response showed a complete response, partial, stable disease and progression in 8.7%, 60.9%, 13.0% and 17.4% of patients. In clinical and radiological complete response was observed, observing a partial response, stable disease and progression in 65.2%, 21.7% and 13.0% of patients. Held 13% of skin-sparing mastectomy, 17.4% of quadrantectomy with glandular remodeling, 4.3% were contralateral breast lift, but were made radical mastectomy 39.1% and 30.4% modified radical mastectomy. The pattern of pathological response was different, occurring macro-fragmentation of single and multiple tumor, with or without carcinoma in situ.

Conclusions: The pathological findings showed a wide range of possibilities. Furthermore they corroborate the need for resection of the tumor area defined before chemotherapy. Most of the remaining findings showed lesions often not palpated or hidden methods of image. The oncoplastic technical approach, as well as skin-sparing mastectomy with immediate reconstruction strategy allows a wide and safe resection, including always the previous tumor area.

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Poster

Updated results of a monocentric phase II trial of Axillary Reverse Mapping (ARM) in breast cancer

E. Cassina¹, N. Tomasi Cont¹, R. Ponzone¹, V. Liberale¹, F. Maggiorotto¹, P. Sismondì¹. ¹A.O. Ordine Mauriziano di Torino and IRCC of Candiolo, Gynecological Oncology, Torino, Italy

Background: The aim of axillary reverse mapping (ARM) is to preserve arm lymphatics in breast cancer patients submitted to surgical axillary staging.

Materials and Methods: From June 2007 to November 2009, 61 patients requiring axillary dissection (AD) were submitted to ARM. One ml of Patent Blue dye was injected in the ipsilateral arm and all blue nodes identified during AD were sent separately for pathological examination. Main variables associated with the detection rates of blue lymphatics, the pathological status of blue and non blue nodes and the complications of the procedure were analyzed. The study is ongoing and more patients are being recruited.

Results: Identification rates of blue lymphatics and blue nodes were 70% and 54% respectively. Blue node identification was influenced by the time elapsed between injection of blue dye and surgery ($p=0.002$), but not by the learning curve of the procedure. Although the blue node was clear of metastases in 29 out of 33 patients, 5 cases with extensive nodal metastatic involvement (pN2a and pN3a) showed breast cancer metastatic cells in the blue nodes as well. The only side effect of the procedure was represented by skin tattooing at the injection site, which disappeared within 4 months in almost 80% of the cases. More updated results will be presented at the meeting.

Conclusions: In patients with clinically negative axillary nodes further study is warranted to assess whether ARM may be used to spare the lymphatics from the arm, whereas in the presence of extensive nodal disease this technique may identify metastatic blue nodes, demonstrating that there is not reliable separation of arm and breast lymphatic pathways.

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Poster

Phase I and II studies on radiofrequency ablation for early breast cancer patients

S. Imoto¹, H. Isaka¹, N. Sakemura¹, H. Ito¹, K. Imi¹, E. Tasaki¹, N. Wada². ¹Kyorin University, Department of Breast Surgery, Mitaka, Japan; ²National Cancer Center Hospital East, National Cancer Center Hospital East, Kashiwa, Japan

Background: To evaluate the safety and reliability of thermal ablation therapy instead of breast-conserving surgery (BCS), we are performing radiofrequency ablation (RFA) for early breast cancer patients.

Patients and Methods: First, we conducted phase I study for T1N0 breast cancer patients without extensive intraductal components. Under general anesthesia, RFA followed by BCS was performed. Resected specimens were examined at 5-mm intervals by hematoxylin-eosin (H&E) staining and nicotinamide adenine dinucleotide (NADH) diaphorase staining.

Results: Thirty of the 34 eligible patients were enrolled. RFA-related adverse events were observed in 9 patients: 2 skin burn and 7 muscle burn.

Twenty-six cases (87%) showed pathological degenerative changes in tumor specimens with H&E staining. In 24 of the 26 cases (92%) examined by NADH diaphorase staining, tumor cell viability was diagnosed as negative.

Conclusions: As RFA proved to be reliable and feasible, phase II study started for T1 and sentinel node-negative breast cancer patients with or without primary chemotherapy. Primary endpoint is breast deformity after RFA and secondary endpoints are ipsilateral breast tumor recurrence and quality of life. We will discuss future direction of RFA in early breast cancer.

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Poster

Revision and contralateral surgery rate after skin-sparing mastectomy with immediate breast reconstruction

S. Malygin¹, E. Malygin². ¹Russian State Medical University, Oncology, Moscow, Russian Federation; ²Clinical Hospital, FMBA, Surgery, Moscow, Russian Federation

Background: Immediate breast reconstruction (IBR) after mastectomy using silicone implants or autologous tissue is the most effective procedure to decrease psychological trauma in breast cancer patients.

With the lapse of time, skin-sparing mastectomy with different reconstructive options was advocated as an oncologically safe method with very good aesthetic results. But late results of this surgical approach, including the rate of complications, revision surgery and contralateral surgery aimed at achieving symmetry are not well established.

Materials and Methods: From 1995 to 2008, 144 skin-sparing mastectomies with IBR were performed in 141 breast cancer patients.

Three patients have DCIS, 19 have I stage of breast cancer, 105 – II stage and 14 – III stage. Locoregional recurrence rate was 2.8%, in patients with median follow-up 6.5 years.

All patients were divided in two groups according to the reconstruction type. There were 76 reconstructions using TRAM-flap, and 68 with silicone implants.

Results: Overall complication rate in group of TRAM-flap was 17.1% including skin necrosis, partial flap necrosis and abdominal wall bulging. Seroma, skin flap necrosis and capsular contracture were established as complications in implant group and they were more frequent (20.5%).

Complications and asymmetry of reconstructed and contralateral breast were the indications for 17 secondary surgeries in TRAM-flap group. There were also 9 revision surgeries including abdominal wall repair, flap lift and creation of inframammary fold in new position in cases of flap ptosis. In 2 cases the volume and the projection of the reconstructed breast were enhanced by a silicone implant. Contralateral surgeries were performed in 7 patients.

In implant group 35 cases required a secondary surgery. In 10 patients the implant was removed due to seroma or skin flap necrosis with implant exposure. Six implants were changed with capsulectomy due to capsular contracture Baker grade III-IV. There were three successful delayed implant-based and one TRAM-flap breast reconstructions after failed implant reconstructions.

Thirteen patients have undergone the correction of the opposite breast to achieve symmetry. As a result, revision rate in TRAM-flap group vs. implants group was 11.8% and 32.3%, and contralateral surgery aimed at achieving symmetry was 10.5% and 19.1% respectively.

Conclusions: IBR is a complex surgical procedure, often requiring additional revision or correction of the opposite breast to obtain the same volume and shape in both breasts.

As we have seen, implant related complications such as a seroma and capsular contracture make some limitation of the implant-based reconstruction method in contrast with TRAM-flap, despite of less cost and traumatic effect. Same tendency observed, when we compare revision rate and frequency of contralateral surgeries to obtain symmetry.

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Poster

Locoregional and systemic recurrence of breast carcinoma after breast conserving surgery versus modified radical mastectomy

M. Akbari¹, S. Moosavi¹, A. Akbari¹, M. Khayamzadeh¹, M. Hadizadeh¹. ¹Shahid Beheshti University of Medical Sciences, Cancer Research Center, Tehran, Iran

Background: Breast Conserving therapy (BCT) has been shown to be as effective as mastectomy in the treatment of early stage (I, II) breast cancer. However evidence of its safety and efficacy over long term in patients with tumors larger than 5 cm or stage IIIA patients are limited but it is exclusively related to Breast size.

This study was designed to compare locoregional recurrence (LRR) and distant metastasis (DM) in the two treatment groups: Breast conserving surgery plus radiation versus modified radical mastectomy. Also it addresses the effect of locoregional and systemic recurrence on overall and disease free survival in the treatment arms.