

was successful in 51 procedures (51/55; 93%). Of the 4 procedures in which both techniques failed, an axillary nodal dissection was performed in 3 cases. In one case the SLN was found by palpability. Sensitivity, specificity, PPV and NPV for blue dye and for lymphoscintigraphy were 68%, 50%, 33%, 81% and 97%, 12%, 40%, 92%, respectively. Combining both techniques resulted in values of 99%, 5%, 27% and 90%.

Conclusion: Blue dye injection, as adjunct to lymphoscintigraphy, resulted in 0.7% additional SLN detections. Blue dye detected the SLN in 20% of failed lymphoscintigraphy procedures. This implies that blue dye is most useful when lymphoscintigraphy is unsuccessful.

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Poster

Validation of Three Breast Cancer Nomograms for Predicting the Non-sentinel Lymph Node Metastases After a Positive Sentinel Lymph Node Biopsy and a New Formula for Predicting Non-sentinel Lymph Node Status. (Second Study From Turkey – First Unicenter Study)

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Introduction: At present sentinel lymph node biopsy (SLNB) has become a standard procedure for staging and selecting the treatment of early stage breast cancer. Although patients who have positive SLNB should undergo to axillary lymph node dissection (ALND), about 40–70% of them have no nonsentinel lymph node (NSLN) metastasis. Therefore many patients undergo to unnecessary axillary dissection. Several institutions have developed nomograms to identify patients with a sufficiently low risk of nonsentinel lymph node metastasis to avoid completion axillary lymph node dissection.

Purpose: The aim of the study is to evaluate the available breast nomograms (MSKCC, Stanford, Tenon) to predict non-sentinel lymph node metastasis (NSLNM) and to determine the variables on NSLNM in the SLN positive breast Cancer (BC) patients in the our population.

Method: We retrospectively reviewed patients who underwent SLNB. 170 SLN biopsy positive patients who had completion axillary lymph node dissection were evaluated. We described two groups; group one NSLN negative (70 patients), group two NSLN positive (100 patients).

All variables recorded to the SPSS 15.0 program and analyzed by this program.

The likelihood of having positive NSLNM based on the factors was evaluated by use of chi square test, student t-test and mann whitney u test. Stepwise multiple logistic regression analysis was used to estimate a predictive model for NSLNM. Four factors were found to contribute significantly to the logistic regression model.

After multiple logistic regression analysis of significant parameters, we designed a new formula to predict non-sentinel lymph node metastasis, based on the multivariate analysis.

The areas under (AUC) the receiver operating characteristic curve (ROC) were used to describe the performance of the diagnostic value of MSKCC, Stanford, Tenon nomograms and our new nomogram.

Results: Negative SLN number, SLN extracapsular extension, proportion of positive SLN to total SLN, metastasis size of SLN, progesterone receptor status, LVI, and multifocality were found statistically significant on NSLNM with univariate analysis. The multivariate analysis was performed on the data with the parameters which were found to be significant in univariate analysis.

After stepwise multiple logistic regression analysis multifocality, proportion of positive SLN to total SLN, LVI, SLN extracapsular extension found statistically significant.

AUC results for each nomograms: MSKCC:0.713 / Tenon:0.671 / Stanford:0.534 / DEU:0.814

Conclusion: The MSKCC nomogram was good discriminator of NSLN metastasis in SLN positive BC patients for our population.

A newly created formula depending on four factors is the best prediction toll for discriminate of NSLN metastasis in SLN positive BC patients for our population.

We recommend that; nomograms must be validated before using it for the population, and more than one validated nomograms may be used together while consulting patients.

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Poster

Nipple Sparing Mastectomy with Primary Breast Reconstruction – Local Recurrence and Complications in 246 Cases

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Introduction: Although effective local control is the primary goal of breast cancer surgery, the long-term aesthetic outcome is also important. Better knowledge of the pathogenesis of breast cancer together with rising interest in improved cosmetic results has led to the consideration of the role of skin-sparing and nipple-sparing mastectomy (NSM) in breast cancer treatment.

Aim of study: The aim of our study was to compare complications and local recurrence in patients undergoing NSM with immediate reconstruction.

Material and Methods: This retrospective study was done at 246 breast cancer patients in the period from January 2004. to december 2009. At all patients was done subcutaneous mastectomy with preservation of the nipple areola complex (NAC) with the simultaneous heterologous breast reconstruction with silicone implants. All patients with inflammatory breast carcinoma, Paget's disease, extensive infiltration of skin by cancer, radiology detected infiltration of the NAC are excluded from this study. The main criteria on which the NAC excision was omitted or performed NSM, is the absence of tumor tissue in retroareolar cone (confirmed with histopathology (fast frozen analysis)). At all patient primary breast reconstruction using heterologous contour prosthesis (Mentor Contour Profile[®], a fixed volume implants) was performed.

Results: Average age of the patient was 49 years. Most surgically treated patients was in stage II of disease with the equally participation of stage IIa and IIb (25.6% IIa-IIb 24%). In 7% it was a stage 0 (in situ tumors), 16.2% of patients were in stage I, 14.2% in IIIa, and 0.8% in the IIb stage. Almost 80% percent of the tumors belonging to T1 and T2 (T1–31.9%, T2–47.7%).

The total percentage of relapses after the NSM was 1.6% (4 patients). Lenticular metastases have occurred at 3 patients (1.2%). Diffuse carcinomatous lymphangiosis mastitis appeared in one (0.4%) patient. At 11 (4.5%) patients appeared in the postoperative follow-up distant metastases.

The total percentage of early complications was 15% (37 patients). The most common early complication was skin and / or NAC necrosis (17 patients (6.9%)). Total number of prosthesis explantation due postoperative complications was 12.

Conclusion: NSM with simultaneous breast reconstruction is an adequate surgical procedure for carefully selected patients who require mastectomy. Primary reconstruction of the breast with heterologous implants by performing NSM mastectomy took place in the standard surgical treatment for breast cancer because it does not lead to an increased number of complications, local recurrence and reduced survival, and extremely facilitates socialization and increases quality of life.

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Poster

Observational Study and Evaluation of Blue Dye-assisted Axillary Node Sampling for Axillary Staging in Early Breast Cancer

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Background: Sentinel Node Biopsy (SNB) is considered to be the most reliable and safe procedure for axillary staging. Many studies have reported that utilizing a combination of a blue dye and a radioisotope (RI) provides the highest success and the lowest false-negative rates. However, RIs are regulated, and not all institutions have access to nuclear medicine facilities. Here we describe our experience in using blue dye-assisted axillary node sampling (ANS) for detecting SNs without RIs.

Patients and Methods: 253 early breast cancer patients (without clinically or radiologically detected enlarged lymph node that would be consistent with metastasis) underwent blue dye-assisted ANS between February 2003 to October 2008. Lymphatic mapping was performed by injecting patent blue, and blue lymphatic vessels were identified and followed until the first blue node was revealed. If fewer than 4 blue nodes were excised, axillary sampling was performed until 4 nodes had been obtained in total. Patients with metastatic SNs (SN+ve) underwent axillary clearance or radiotherapy depending on nodal involvement, while SN-ve patients did not undergo any further axillary treatment.

Results: 57 patients were diagnosed with metastatic disease by using the blue dye-assisted node sampling technique. 5 of them underwent axillary lymph node clearance, while 48 received radiotherapy to the axilla (4 patients did receive any further axillary treatment for various reasons after multidisciplinary team discussion). The remaining 196 SN-ve patients did not undergo any further axillary treatment. After a median follow-up of 61 months (range 30–98), one patient in the SN-ve group developed