thick back skin over and/or under the muscle at the time of the mastectomy procedure and the flap was expanded in all of them before transfer, at the same time of the radiotherapy treatment.

After three months, the latissimus dorsi myocutaneous flap was rotated and the expander replaced by permanent silicon implant.

Mean follow-up was 13 months. Transitory redness in the donor skin followed the flap rotation in four patients with no further complications.

It constitutes a valid alternative to achieve a natural skin in burned areas of mastectomy irradiated sites.

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Nipple preserving mastectomy with immediate reconstruction – evaluating necrosis possibility

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Background: One of the recent techniques used to improve the aesthetic outcome in breast cancer surgery is the nipple preserving mastectomy with immediate reconstruction. Necrosis of the nipple-areolar complex (NAC) is, however, one of its major setbacks. The purpose of this study was to try to find a correlation between necrosis of the NAC with the type of procedure used for reconstruction and the histological result.

Material and Methods: Thirty two cases of skin-sparing mastectomy and immediate reconstruction, with preservation of the NAC were evaluated. The procedure was done by the same team, using a superior periarolar incision with a 2 cm lateral extension. In all cases the pre-operative evaluation showed by imaging (mammography and ultrasound) a distance of at least 10 mm to the nipple–areolar complex and intra-operative evaluation, with frozen section of the retro-areolar region was done in all cases, to confirm the absence of invasion of the central region. Methods of reconstruction used were implant-only in 7 cases (21.9%), latissimus dorsi flap with implant in 21 (65.6%), and TRAM flap in 4 (12.5%). In the studied sample there were 22 cases of Ductal Invasive Carcinoma (68.8%), 5 cases of Ductal Carcinoma in Situ (15.6%) and 5 cases of Lobular Invasive Carcinoma (15.6%).The correlation was evaluated using the Chi-Square test.

Results: There were 5 (15.6%) cases of necrosis of NAC (4 parcial and 1complete). Only this last patient needed a second surgery – complete ablation and replacement. We didn't find any correlation either with the type or reconstructive proccedure or the histological result and NAC necrosis.

Conclusions: Our results reinforce that nipple preserving mastectomy with immediate reconstruction, can be an alternative choice in selected patients. Necrosis is however probably not related neither with histology nor with the type of procedure chosen for reconstructing the breast.

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Value of latissimus dorsi flap (LDF) in breast conserving surgery (BCS)

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Background: Breast conservation has more than 30 years history in the treatment of early stage breast cancer. BCS as alternative to mastectomy is appropriate management from 1/2 to 2/3 of patients with early stage breast cancer. However, there are still 2 main problems in BCS: local recurrence rate (which is usually greater compare with mastectomy) and aesthetic view of the operated breast. LDF could be helpful in solving these 2 problems. The objective of this study was to evaluate oncologic and cosmetic results in BCS and immediate reconstruction with LDF.

Patients and methods: from 12/97 to 12/06 65 patients were treated with extensive quadrantectomy and immediate reconstruction with LDF. Patient's median age was 44.5 years, N+ were 61%, N− 39%, tumor size ranged from 1.5 cm to 5 cm. 38% of patients had preoperative chemotherapy, 98% received postoperative radiotherapy. Most of tumors (80%) were localised in the upper lateral quadrants. Histologically margins were free in all cases. The median duration of operating time is 165 min.

Results: immediate postoperative morbidity – dorsal seroma (longer than 2 weeks) was noticed in 42 cases (64.6%), infection – in 2 (3.1%) cases. There were 8 (12.3%) recurrences – 5 distant, 1 axillary and 2 distant simultaneously with local, 3 patients died. Cosmetic evaluation was done using oblique measurement from nipple to incisura jugularis: 24% very good, 48% good, 15% satisfactory and 13% poor.

Conclusions: 1. Using LDF allows to perform BCS in big tumor cases, when usually it's impossible in normal BCS. 2. In small tumor cases LDF allows to perform wider BCS. 3. This method preserves good breast cosmesis, so there is no need of cosmetic operation on the other breast.

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Influence of the type of breast cancer surgery on the functional status of the arm

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Background: Axillary nodal status is the most important prognostic determinant in breast cancer. In addition it influences the use of both local and systemic therapies. Nodal status is most accurately determined by histological analysis of the nodes excised during axillary clearance. However, axillary dissection is associated with substantial arm morbidity and risk of lymphoedema. As axillary sentinel lymph node biopsy (SLNB) became standard of care for staging early breast cancer, a decrease in arm morbidity has been reported. The aim of this work is to evaluate the relationship between number of axillary lymph nodes removed and early postoperative arm morbidity (arm functional status).

Material and Methods: The study group consisted of 113 consecutive patients, aged 26 to 80 years (median age 58) with stage 0, I or II breast cancer, operated upon in the Department of Breast Cancer and Reconstructive Surgery and evaluated in Physiotherapy Department afterwards, between February 2006 and November 2007. Out of these 113 patients, 32 (28.3% – group 1) underwent modified radical mastectomy, 23 (20.3% – group 2) simple mastectomy with SLNB, 26 (23% – group 3) breast conserving therapy with axillary clearance and 32 (28.3% – group 4) tumorectomy with SLNB. Mika & Kulakowski test was used to assess the functional arm status and early arm morbidity. This test consists of the assessment of mobility restriction, lymphoedema and hand muscle strength. The relationship between functional arm status and the type of breast surgery was analyzed.

Results: No differences in lymphoedema occurrence and hand muscle strength were observed between the treatment groups during early arm mobility evaluation after breast surgery. There was a marked difference in the arm mobility restriction: the lowest mobility restriction was observed in the group treated with tumorectomy and SLNB.

Conclusions: In terms of arm functional status, the benefits of sentinel lymph node biopsy (SLNB) over axillary dissection appear to be observed even at the early postoperative time. However, long-term effects have to be confirmed by further, larger studies.

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Predictors of wound complications following breast cancer surgery

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Background: The complication rate following breast cancer surgery (BCS) is considered to be low. The most frequently cited complications are related to wound infection (superficial/deep), dehiscence and seroma formation.

Material and Methods: Data of 902 patients were collected from breast cancer registers from Surgical clinic Nis between 2003–2006. The database was queried for all women undergoing mastectomy (MT) or lumpectomy with an axillary procedure (L-ANP). Logistic regression models for the prediction of wound complications were used.

Variable	Odds Ratio estimate	P
Mastectomy	3.112	<0.0001
Preoperative albumin	0.412	0.0004
Diabetes	2.891	<0.0001
Obese (BMI > 35 kg/m^2)	2.567	<0.0001

Results: We identified 599 patients (66.41%) who underwent mastectomy and 303 patients (33.59%) who underwent L-ANP. The wound infection rate for mastectomy and L-ANP were 4.17% and 1.82%, respectively, with a total rate 5.99%. Detailed analysis of postoperative wound events demonstrated that most infections were superficial (4.32%); mastectomy was associated with a higher rate compared with L-ANP (2.67% vs. 1.65, P = 0.006). Performance of a mastectomy, compared with L-ANP, was also associated with more significant wound issues,