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Retrospective analysis of routine preoperative chemotherapy on effectivity and survival of 61 inflammatory breast cancer patients

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Background: Inflammatory breast cance (IBC) is the most aggressive form of this type of disease, so it is vitally important detect as early as possible, in order to have the chance for cure.

Materials and Methods: In this retrospective analysis, we selected 61 IBC patients who were entered our breast cancer registry before 31/12/2004. IBC was defined according to the Haagensen-criteria and confirmed by mammography (MGR), US, FNB and/or core biopsy. Choosing from the chemotherapy regimens according to our institutional rules based on the discretion of the treating physician. Three kinds of evaluation methods were used for getting the treatment results: (1) based on the the clinical evaluation of the treating physician; (2) based on the pathologiacal evaluation of the primary tumor; (3) a combination of (1) and (2) and including the pathological lymph node status.

Results: The median age was 59.66 years, 20.3% of the patients were pre- or perimenopausal and 78.7% postmenopausal. The mean size of the tumors measured by MGR and US was 32.79 mm (95% CI: 21.02−44.57) and 24.0 mm (95% CI: 16.46−31.54), respectively. Most patients had palpable lymph node metastases: N1: 44.26%, N2: 39.24%, among these 9.84% of the cases had supraclavicular lymph node metastasis, as well. Histological confirmation (core biopsy) was perfomed in one-third of the patients (20/61), most of them (65%) had invasive ductal carcinoma. In 94.44% of the patients, histological grade was grade II or III. Steroid hormone receptor positivity/negativity was 59.09% and 49.91%, respectively, HER2 and/or FISH positivity was seen in 38.89%. Anthracycline-containing regimens were used twice as often as the newer docetaxel–anthracycline combination (63.93 vs. 29.51%). After finishing primary chemotherapy overall 78.7% of patients had surgery. All except one patient had mastectomy, and 78.68% recieved adjuvant therapy.

Effectivity of primary chemotherapy was as follows: CR: 13.3%, PR: 32.7%, SD: 36.7%, PD: 18.3%. After a median follow-up of 2.94 year, 45% of the patients have died, 31.67% are living without relapse, and 23.33% have relapsed. The mean PFS was 1.98 (95% CI: 1.42−2.54) years, the OS was 3.11 (95% CI: 2.63−3.60) years. The better the effect of primary treatment, the longer progression free survival could be reached, without the same observation on overall survival. Both PFS and OS were significantly altered between the 'operated' and 'non-operated' group (log-rank = −2.41, p = 0.015; log-rank = 3.90, p = 0.001, respectively). None of the subgroups of predictive factors and histological grade, or the type of chemotherapy significantly pointed to PFS or OS.

Conclusions: Every efforts should be made to achieving objective response during the primary treatment of IBC in order to make the tumor resectable. A highly significant difference could be confirm between the operated and non-operated group, according to PFS. However, none of the well-established prognostic and predictive factors could predict the survival. Adding taxane to the anthracycline-containing regimens has not improved survival.

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Avoiding back wound dehiscence in extended Latissimus Dorsi flap reconstruction: a new surgical technique

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Background: Extended Latissimus Dorsi (LD) flap requires extensive dissection and mobilization of the muscle and subcutaneous fat at the level of the superficial facia. The back skin is only supplied by the subdermal plexus. Back wound dehiscence may occur due to damage to this plexus at the wound edges.

Aim: Assessment of a new surgical technique to reduce donor site wound dehiscence after extended LD flap reconstruction.

Patients and Methods: Patients treated with extended LD flap reconstruction between January 2005 and January 2007 were studied prospectively.

Surgical Technique: Transverse skin ellipse 6 × 12 cm (larger in delayed reconstruction), planned in the bra strap line. The subcutaneous fat is divided down to the level of the LD muscle and dissection continues in this plane for a distance of 3 cm in all directions. The subcutaneous dissection is then started at the plane of superficial fascia to harvest the fat deep to this fascia. Quilting stitches are used and the wound closed in 2 layers.

Results: 12 patients were reviewed (10 immediate and 2 delayed). Two patients were smokers. The mean age was 54.4 (Range 42−64) years and the mean BMI 27.5 (Range 22.3−38). The mean weight of the mastectomy specimen was 551 g (280−980). 6 patients developed back seroma, which required aspiration and 1 patient developed a haematoma of the reconstructed breast. All wounds healed primarily.

Conclusion: The new technique is safe, simple and effective in avoiding wound dehiscence of the donor site after extended LD flap reconstruction.

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Balancing autogenous tissue with an implant in extended Latissimus Dorsi flap reconstruction of the breast: a new concept

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Background: Classical extended Latissimus Dorsi (LD) flap reconstruction involves the transfer of extra fat, which allows a softer, warmer and a more natural looking reconstruction. This avoids implant, but increases the donor site morbidity and requires a large back scar.

Aim: To investigate a new concept of balancing the amount of extra fat harvested with an implant.

Patients and Methods: Patients undergoing extended LD flap by the same team were studied prospectively between January 2005 and January 2007. The breast volume (BV) was estimated and the desired volume of the reconstructed breast (DV) was planned at 20−30% larger. The contralateral breast dimensions were measured and the implant dimensions were planned at 2−4 cm smaller.

Result: 10 patients had mastectomy and immediate reconstruction. Patient's mean age was 54.1 years and BMI 26.3. The mean BV was 512.2 ml and DV was 610 ml. The mean weight of mastectomy specimen (Wt.) was 503.6 g, and of the implant 264.4 g. The BV was significantly correlated to Wt. (Pearson correlation = 0.9, P = 0.001). The mean (cm) contralateral breast width was 14.2, height 12.1, projection 8.3 and of the implant width 11.6, height 10.1 and projection 4.9. The mean follow-up period was 10.6 (Range 2−19) months. Cosmesis was rated excellent by patients and surgeons. 6 patient's developed back seroma and one patient had a breast haematoma.

Conclusion: Excellent cosmesis and maintaining the benefits of autogenous reconstruction could be achieved by balancing autogenous tissue harvested with an implant to avoid donor site morbidity.

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Scoring photographic assessment of normal tissue effects after radiotherapy for early breast cancer – a comparison of two different methods

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Introduction: Photographic assessment of change in breast size and shape provides a clinically valid and sensitive measure of late radiation effects, but is very time-consuming. A simpler scoring system is proposed.

Methods: 1410 early breast cancer patients were randomised after local tumour excision (conservative surgery) to 50 Gy in 25 fractions (control), or 39 or 42.9 Gy in 13 fractions, over five weeks. Post-operative photographs were taken before radiotherapy and during follow-up. Change in breast size and shape compared with the postoperative baseline was scored on a 3-point graded scale (none/minimal, mild or marked). Two scoring methods were compared: I) based on three independent observers, independent re-scoring of any discrepancies and final resolution through discussion, and II) based on establishing immediate consensus. Five-year photographs for all patients receiving 39 Gy or 42.9 Gy were assessed in order to estimate the treatment effect.

Results: Using the consensus scores the odds ratio for change in breast appearance at five years was 1.89 (95% CI 1.21−2.96) for 42.9 Gy versus 39 Gy, which compared favourably with observers acting independently (OR 2.28, 95% CI 1.50−3.47). Comparison of the two sets of scores showed an agreement of 77.2% (weighted Kappa 0.56). A random 10% subset was rescored using the consensus method, which showed good repeatability (86.2% agreement, weighted Kappa 0.77).

Conclusion: The results suggest that the consensus method of scoring photographic change in breast appearance is as sensitive to randomised dose as the original method, and is quicker. Since this validation study, a team has begun scoring the photographs taken in the START (Standardisation of Breast Radiotherapy) trial and is able to perform >250 assessments per hour (compared with 100 per hour using the old method). The consensus method is proposed for all photographic assessments of change in breast appearance in radiotherapy trials.