bigger number of cases with longer follow-up period is needed to validate statistically the oncology safety of the NSM performed by us. The early results convinced both surgeons and patients in the esthetic benefits of NSM with immediate reconstruction versus modified radical mastectomy (MRM) or skin-sparing mastectomy (SSM). This intervention increases patient's quality of life and satisfaction of the treatment results, and could be a reasonable alternative of classical mastectomy in selected patients.

294 Poster

Pain and analgesic consumption after breast cancer surgery − a prospective study

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Background: Pain after breast cancer surgery is not very well studied. Our aim was to study the severity of pain and oral analgesic consumption in patients in the week following surgery for breast cancer.

Materials and Methods: In an ongoing prospective audit, women undergoing breast cancer surgery were asked to record the severity of pain daily using a visual analogue scale (range 0–100) for a period of one week starting the day after the operation. They were discharged home on oral analgesia and also kept a record of oral analgesic consumption during this period.

Results: Among 81 patients studied so far, 66 had breast conserving surgery, 13 had mastectomy, and 2 had axillary clearance only. The median pain score on the first post-op day was 18 (0−87) and on 7th post-op day 2 (0−34). Ten (8%) patients have stopped taking oral analgesia by day 1, and 47 patients (58%) by day 7. We noted that patients who recorded highest pain scores often did not take the recommended daily maximum of oral analgesia.

Conclusions: Breast cancer surgery is not associated with significant pain in the post-operative period and the severity of pain decreases steeply in the week following surgery. Only about 40% of patients require oral analgesia beyond a week. It may be appropriate to discharge patients with a week's supply of take-home analgesia. This would reduce cost and unwanted side-effects as some patients would aim to complete the prescribed course of analgesia even if they are not in pain. Those who require analgesia for a longer period could obtain it at the follow-up breast clinic visit, or from their general practitioner. Encouraging patients that it is safe to take the maximum recommended daily dose of oral analgesia may further improve pain control post-surgery.

295 Poster

10-year results of breast conserving treatment using perioperative brachytherapy boost and delayed boost after whole breast irradiation in material of Maria Sklodowska-Curie Memorial Cancer and Institute of Oncology in Warsaw, Poland

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Background: Comparing results of treating patients with breast cancer at whom we applied boost with perioperative brachytherapy (BRT) HDR Ir-192 or after irradiation of entire breast from external fields (WBI).

Materials and Methods: In years 1997–2003 we included 115 patients with breast cancer in the stage T0−2 N0−1 whom we applied the boost with BRT method; in 40 cases − perioperative (group I), in 75 − after the teleradiotherapy (group II). No statistical difference (age, diameter of tumor size, pTNM) between these two groups was observed. In group I we applied boost in the dose of 10 Gy/1 fr, and then WBI in the dose of 50 Gy/25 fr or 42.5/17 fr. In group II after operation we performed WBI, and then after 5 days BRT in the dose of 10−15 Gy/1 fr.

Results: Median of the time of observation was 125 months. The volume of irradiated of breast tissue in group I was 8−75 cm^3 (24.3 cm^3), in group II 10−56 cm^3 (36 cm^3) $p < 0.001$. Distant metastases were observed in 3 patients (7.5%) in group I and 6 (8%) in group II. In group I we observed 1 (2.5%) local recurrence, in group II − 3 (4%). Also a statistical difference in DFS wasn't observed ($p = 0.77$). Also a statistical difference wasn't shown ($p = 0.812$) in the evaluation of the cosmetic effect between both groups.

Conclusions: Applied sequence perioperative BRT is comparable to the traditional sequence of treatment.

296 Poster

Direct monitoring by Cook-Swartz Doppler − a study of 7 years in Free-Flaps operations; macro, micro and re-exploration results in regard to breast reconstructive surgeries

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Background: After establishing the microvuscular techniques for blood vessels anastomosis of free-flaps operations, began the phase of enhancement an accurate and precise methods to minimize the failure of free-flaps, most frequently on account of venous disturbance and occlusion. This necessity promoted invention of several techniques trying to predict and prevent this unfortunate outcome. A variety of devices have been mentioned in the literature, however none had the ability to fulfill the basic requirements that can be applied to all kinds of free-flaps surgeries. The Cook-Swartz Doppler is a 20 MHz Ultrasonic device, invented and modified the past 2−3 decades, which is placed distal to the microvascular anastomosis. A silicone cuff circulates the vein examined, from this probe; a wire leads continues signals to the device being place near the patient bed. These audio signals are being monitored routinely by medical personnel.

Methods: In a retrospective study (1997–2007), tracking the admission and usage of the implantable Doppler probe, since 2000 in the microsurgical unit, we evaluated all parameters mentioned further from 523 consecutive patients, underwent 608 microsurgical procedures, 77 of them had Breast reconstructive surgeries. The data in this research was taken from several sources: patients' medical files, surgery reports and implanted Doppler reports. From these documents we retrieved the medical files of patients who underwent secondary surgery (revision) due to blood flow obstruction.

In this research we examined:

1. The efficacy of this modality, in Macro and in Micro aspects: each of the branched microsurgical divisions, emphasized Breast reconstructive unit opposing to other sub-divisions, comparing results of overall success and failure rates to the control group monitored in traditional means.
2. Re-exploration operations: time taken place, finding outcomes, sensitivity and specificity of this modality.
3. Learning curve of the medical staff.

Results:

1. The overall success rates are promoted by this device, from 90.62% to 95.33%. Prominent effectiveness found in Breast reconstruction division (94.6% vs. 77.5%), with statistical significant ($P < 0.05$).
2. Higher rate of microsurgical revisions monitored by implantable Doppler versus the control group (12.84% vs. 8.54%). Nevertheless, achieved tremendous success rates (87.9% vs. 46.6%), especially due to earlier detecting time of blood interference/occlusion (1–1.18 days vs. 2.5−2.7 days). In Breast reconstructive surgeries, we tracked a considerable high rate of free-flap salvage success rate (83.33% vs. 42.85%); and an average of rapid detection time which quickly brought the patient to a re-exploration at the theatre (1 vs. 2.571 days), with statistical significant ($P < 0.05$). 100% Sensitivity and 91.6% specificity for this modality.
3. Conspicuous learning curve (reducing operation time by an average of 3 hours and one hour shorter for revisions).

Conclusions: The implantable Doppler is valuable and predictable monitoring device. It was found to be safe and easy to use, reliable in time and accuracy and most beneficial in Breast reconstruction division. In divisions with no or less success, we suggest cutting costs and transferring this modality to recommended divisions.

297 Poster

Nationwide survey of the use of absorbable mesh in breast surgery in Korea

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Background: It is known that many physicians have been using mesh on breast surgery recently but, there is no information for this practice. The aim of this study is to investigate the present use of mesh at breast surgery in Korea.

Methods: We conducted a survey from members of Korea Breast Cancer Society by phone, E-mail, and notice on the website from 6th to 20th April 2009.