

For all the patients, we performed an X-ray of the lumpectomy specimen with the FX and measured the radiological margins surrounding the cancer. The lumpectomy was then sent for intraoperative HE and we made complementary resections when required by the pathologist.

For each patient, we compared the size of the surgical margins evaluated by FX and by HE.

Results: The FX provided an x-ray image of the lumpectomy in 90 seconds. It allowed an evaluation of the margins status in 96% of the cases.

The pathologist asked for complementary resections in 17% of the cases from which 65% were already performed after the FX procedure. MS evaluation with the FX was corroborated by the intraoperative HE in 94% of the cases.

Furthermore, when the margins, measured using the FX, were equal or superior to 5 millimetres, the margins measured by HE were negative in 100% of IDC cases and in 90% of the DCIS and ILC cases.

Conclusion: The evaluation of MS with the FX allows the achievement of negative margins in 94% of the cases when compared to HE. The accuracy of the FX depends on the histological subtype of the cancer. A better selection of the patients might enhance the accuracy of the FX procedure.

Moreover, the procedure lasts only 90 seconds which allows important time-saving. If our data are confirmed the FX procedure might be able to replace intraoperative HE in some specific indications.

613

Poster

Analysis of Immediate Breast Reconstruction with the Use of Titanized Polypropylene Mesh (TiLOOP® Bra)

E. Klein¹, M. Kiechle¹, J. Etti¹, D. Paepke¹, S. Paepke¹. ¹Klinikum rechts der Isar – Technische Universität München, Department of Obstetrics and Gynaecology, München, Germany

Background: Breast cancer surgery has taken a turn over the past decades. New surgical strategies have generated advanced methods concerning oncologic safety combined with improved cosmetic results. A number of publications outlined that the application of tissue-supporting materials result in improved cosmetic outcome.

Even the AGO guidelines have added the application of tissue-supporting extraneous materials to the section of reconstructive breast surgery in the year 2011.

Material and Methods: The authors prospectively studied the feasibility, rate of complication and cosmetic outcome of 87 performed combined skin-sparing mastectomy and immediate prosthetic breast reconstruction with the usage of TiLoopBra mesh.

Data such as body mass index, nicotine abuses, diabetes mellitus and others were taken into account. Also rate of postoperative infection, hematoma, seroma, time of drainage and antibiotic therapy were assessed.

Results: 87 patients with a median age of 45.6 years (26 to 76) were evaluated. 82.8% of the patient collective had a oncologic operative indication.

The average prophylactic antibiotic therapy was applied 3.6 days and median drainage duration were 4.7 days.

Mastectomy weight averaged 307.8g (181–820g); implant volumes ranged between 125 and 680 cm³ (median 327 cm³).

We recorded an infection rate of 10.3% (only light superficial skin infections), postoperative hematoma rate of 17.2% and 9.2% of postoperative seroma.

Conclusions: This analysis showed that the application of titanized polypropylene mesh in immediate reconstructive surgery results in an excellent cosmetic result with greater flexibility in forming the former breast shape. It is a safe procedure with a low rate of complications.

Additional follow-up data are now required to assess further data on the cosmetic outcome, patients satisfaction and oncologic safety.

614

Poster

First Experiences with the Implementation of a Two Component Polypropylen-vicryl Mesh (SERAGYN® BR) as Tissue-supporting Extraneous Material in Plastic Reconstructive Surgery

S. Dittmer¹, S. Paepke¹, E. Klein¹, R. Ohlinger¹, M. Kiechle¹. ¹Klinikum rechts der Isar – Technische Universität München, Department of Obstetrics and Gynaecology, München, Germany

Background: Because of excellent experiences, the application of acellular dermis and other tissue-supporting meshes in plastic reconstructive breast surgery is approved by guidelines of the gynecologic oncologic committee (AGO) in Germany.

Since March 2011 a partially absorbable two component mesh is available. The basic fiber consists of an absorbable PGA-CL and after resorption 6 singular, parallel layed polypropylene filaments remain permanently. The material components are suitable for plastic reconstructive breast surgery.

Material and Methods: From March 2011 to September 2011 we performed 12 subcutaneous mastectomies with immediate reconstruction via implant placement and application of the SERAGYN two component mesh (n = 14) in breast cancer patients (median age = 49 years).

Results: Mastectomy weight averaged 329g (120–580g); implant volumes ranged between 125 and 515 cm³ (median 335 cm³). Implant location was mainly sub pectoral, in 3 cases the implant was covered by mesh only.

We recorded no mesh arrosion, no wound infection and no unscheduled second operations.

The mean time of drainage summed up to 8 days, in one patient a maximum of 11 days and still a puncture of seroma after drainage removal was necessary.

Conclusions: Because of the combination of the different materials and special texture of the large-pored, partially absorbing meshes a stability of shape and softness of the reconstruction can be achieved.

Convincing also are low rates of complications and good cosmetic results.

However the still small number of cases and the short follow up limits the validity of this conclusion. Currently a prospective, multicentre analysis will merge the experiences of the different study centers.

615

Poster

Skin Sparing Mastectomy: Evaluation of Oncological Safety in 82 Cases Treated in Brazilian National Cancer Institute

E. Millen¹, T. Lannes¹, M. Bello¹, R. Motta de Carvalho¹, K. Souza Borges², P.A. Ormonde¹, A. Bergmann¹. ¹INCA, Breast Surgery Division, Rio De Janeiro, Brazil; ²INCA, Plastic Surgery Division, Rio De Janeiro, Brazil

Background: The surgical treatment of breast cancer has evolved from radical mastectomy to breast conservative therapy. Today we have another therapeutic dilemma: how to manage the Skin Sparing Mastectomy (SSM) offering patients better aesthetic results with oncologic safety.

Methods: We analyzed data on 82 consecutive skin sparing mastectomies (SSM) with immediate reconstruction with tissue expander, prosthesis or autologous tissue performed in a Brazilian National Cancer Institute (INCA) in 2001–2008. SKIN-sparing mastectomy (SSM) were performed only for breast cancer treatment (n=82) and no one case was included with prophylaxis, risk reduction or contralateral breast symmetrization.

Results: Mean patients age was 46.8 years (range 19 to 67 years) and mean follow up time was 49.9 months (range 20 to 106 months – SD 18.6). 36 patients were stage 0 (43.9%), 21 stage I (25.6%), 24 stage II A and B (29.3%) and in 1 patient stage 3 (1.2%). On pathologic review, 22 patients (26.82%) had in situ ductal carcinoma (DCIS), 51 invasive ductal carcinoma (IDC) (62.19%) and 7 (8.53%) invasive lobular carcinoma (ILC) and special type of carcinomas in two cases (2.43%). Seventy (85.4%) of patients presented with sentinel node negative and twelve (14.6%) presented with positive axillary nodes. Adjuvant treatment was delivered based on status on the estrogen and progesterone receptor, tumor diameter and node status. Patients with 4 or more axillary positive lymph node received adjuvant radiotherapy. There were 3 local relapses and 2 deaths among the group. The disease free survival (DFS) was 101.7 months (SD 2.4) and overall Survival (OS) 98.5 months (SD 4.12). The local relapses and deaths occurred among the group of invasive carcinoma, and no patient with positive lymph node had local relapse or death, probably reflecting more targeting adjuvant systemic therapy.

Conclusion: These data demonstrates that SSM is oncologically safe and can be performed with all types of breast reconstruction.

616

Poster

Sentinel Node Biopsy Analysis Using Intraoperative One-Step Nucleic-Acid Amplification (OSNA): Are We Really Saving Patients a Second Operation?

D.D. Remoundos¹, H.A. Wilson¹, V.V. Ng¹, F. Ahmed¹, Y. Chia², G.H. Cunliffe¹. ¹Wycombe Hospital, Department of General Surgery, High Wycombe, United Kingdom; ²Wycombe Hospital, Department of Histopathology, High Wycombe, United Kingdom

Sentinel Node Biopsy (SNB) has become standard practice for staging the axilla in clinically node negative breast cancer patients. SNB positive patients undergo a delayed axillary dissection after routine histological assessment of the sentinel node. OSNA is a novel molecular method for detecting lymph node involvement, using a standardised automated machine, requiring minimal pathologist input.

However, it has been argued that the benefit from a single-step procedure is negated somewhat by those patients who require further breast surgery – margin re-excision or completion mastectomy. The aim of this study was