

22,8%)(Fig. 1). Interestingly, subset analysis showed a 1,4 % decrease in the overall incidence of reconstructive procedures performed in 2012.

Conclusion: Epidemiologic analysis of autologous breast reconstructions identifies the most important procedural, geographical and patient characteristics. DIEP breast reconstruction predominates as a method, which uses the autologous flap. Approximately a third of all reconstructions were performed in Southern United States.

LOP36: The Impact of Radiation, Lymph Node Dissection, and Hormonal Therapy on Outcomes of Total Skin-Sparing Mastectomy and Immediate Tissue Expander-Based Breast Reconstruction

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Question: As total skin-sparing mastectomy (TSSM) with immediate breast reconstruction has increased in popularity, reconstructive surgeons are managing more patients who are still undergoing adjuvant therapies for their breast cancer. We aimed to assess risk factors for postoperative complications after tissue expander (TE)-implant exchange.

Material and Methods: We reviewed TSSM cases with immediate TE reconstruction from 2006 to 2013 that had completed TE-implant exchange with at least 3 months of follow-up. Patient demographics, comorbidities, surgical characteristics, and postoperative complications were collected prospectively. A generalized estimating equation (GEE) model for relative risks (RR) was developed to assess the risks of radiation therapy, lymph node dissection, and hormonal therapy.

Results: We identified 776 TSSM cases performed in 489 patients with median follow-up of 26 (IQR 10-48) months. In our multivariate model, any radiation prior to exchange increased the risks of wound breakdown, infections requiring oral antibiotics, infections requiring intravenous antibiotics, infections requiring procedures, and implant loss. Axillary lymph node dissection (ALND) increased the risks of wound breakdown, infections requiring oral antibiotics, and implant loss independent of radiation exposure. Hormonal therapy was not associated with an increased risk of complications.

Conclusion: In this retrospective cohort study, we demonstrate that ALND is a significant risk factor for wound breakdown, infections requiring oral antibiotics, and implant loss after controlling for radiation exposure. Radiation remains a major risk factor for wound breakdown, infections, implant exposure, and implant loss.

LOP37: Surgery for Lip Haemangiomas: A New Score of Severity, to Predict Functional and Cosmetic Results, according to the Aesthetic Units of the Face.

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Lip Hemangioma is a challenge, because of the frequent pain and ulceration that force the infant to interrupt feeding. The dismorphodynamic damage and psychosocial implications make the initial lesion gradually more complex.

Material and Methods: The author establishes some benchmarks of the initial vascular lesion, which take account of relations with the aesthetic units of the face, and the clinic. The sum of these parameters generates a Score of Severity (S.O.S.), which alone represents a useful index of Topographic and diagnostic severity. A retrospective review of hemangiomas of the lip surgery from 2010 to 2013 was performed at the Center for Multidisciplinary Vascular Anomalies of "Bambino Gesù Children's Hospital Institute of Rome. The parameters in the study included the extent and location

with respect to the initial anatomical aesthetic units of the lip, the deep tissue, complications, and the correlation between the severity of the initial injury and the aesthetic and functional outcome.

Results: The personal series consists of 221 hemangiomas of the upper and lower lip, with a mean follow-up of 21.4 months. 13% of the lesions had a lip SOS3 / Range3-Poor in which was kept a discreet functionality orbicularis without drooling remaining. 37% belonged to the class SOS2 / Range2-Moderate, and finally the remaining 60% were in class SOS1 / Range1-Excellent, with the best results in terms of lip balance, symmetry, functionality and color skin match.

Conclusion: Surgery is the most effective therapy for hemangiomas of the lip and produces good esthetic results. According to the aesthetic unit, the surgical approach allows to make a prediction on the residual risk of structural distortion, and possible outcomes of debilitating surgery. The initial Score and the Range suggest somehow the optimal timing for surgery, that is the one that gives the best aesthetic and functional results obtained in that particular lesion. The higher is the SOS, the earlier must be the intervention of removal and reconstruction.

LOP38: Effects of quick perfusion-based fat processing on the quantity and quality of the cellular components: Clinical implications in autologous fat grafting

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Introduction: Autologous fat grafting is a popular technique in plastic surgery. A mechanical processing method is used to allow facilitated fat injection. No study has investigated whether this process affects cell quality and preservation of biological functionality. This study analyzed the influence of quick perfusion through two interconnected small-diameter syringes ("shuffling") both on structure and viability of fat tissue, as well as on viability, clonogenicity and differentiation of the freshly isolated stromal vascular fraction (SVF).

Material and Methods: Lipoaspiration was performed in six donors, followed by shuffling the fat either zero, five or thirty times between two 10cc syringes. Thereafter, fat was applied through a 1.5mm cannula as in a clinical setting for autologous fat grafting. Analysis of six treatment conditions was conducted. Immunofluorescent staining allowed assessment of morphology, viability, composition and damage of the tissue. The SVF was examined for isolation yield, viability, clonogenicity and differentiation capacity.

Results: Shuffling changed the macroscopic, but not the microscopic structure of lipoaspirated fat. No difference in cell number, viability, number of lipid droplets, vascular architecture or ratio of cell composition was found. Analysis of the SVF, apart from large inter-donor variability, did not show a significant change in isolation yield, viability, clonogenicity or differentiation capacity of the expanded cells.

Conclusion: The mechanical procedure of shuffling lipoaspirated fat does not alter its tissue viability or microscopic structure. The absence of impact on the SVF in the assessed parameters suggests that shuffling can be executed according to surgical needs.

LOP39: The Effect of Chemodenervation by Botulinum Neurotoxin on the Degradation of Hyaluronic Acid Fillers – An Experimental Study

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One of the most common complaints for hyaluronic acid fillers is the early degradation. Combination of hyaluronic acid fillers with Botulinum Neurotoxin-A (BoNT-A) is common and improved clinical results were presented. Although improved clinical results were published, objective measurement of hyaluronic acid volumes