**Affiliation: University of Miami Miller School of Medicine, Miami, FL**

**INTRODUCTION:** Patients with end-stage renal disease (ESRD) may require a panniculectomy in preparation for renal transplantation. ESRD is associated with increased cardiovascular risk factors, electrolyte imbalances, and chronic anemia. These factors may increase the risk of adverse outcomes in patients undergoing panniculectomy. Purpose of this study was to evaluate safety and perioperative complication rates in ESRD patients following panniculectomy.

**METHODS:** Nationwide Inpatient Sample (2006–2011) was employed to identify patients who underwent panniculectomy. Among this cohort, patients with ESRD were identified. Pregnant women, children, emergency admissions, and patients that underwent concurrent nephrectomy or renal transplants were excluded. Demographic factors, comorbidities, and postoperative complications were evaluated. Bivariate and risk-adjusted multivariate logistic regressions were performed to determine if ESRD was associated with increased rates of postoperative complications.

**RESULTS:** A total of 34,779 panniculectomies were performed during the study period. Of these, 613 (1.8%) were performed in patients with ESRD. ESRD cohort was older (mean age 58.9 vs. 49.3, p<0.01) and with a higher proportion of men (29.9% vs 11.1%, p<0.01) than non-ESRD group. As expected, ESRD cohort had higher rates of co-morbidities (p<0.01). Most ESRD patients were treated at urban teaching hospitals (70.0% vs 59.8% for non-ESRD, p<0.01). Post-operatively, patients with ESRD had a higher rate of in-hospital mortality (3.3% vs. 0.2%, p<0.01), wound complications (10.6% vs. 6.2%, p<0.01), venous thromboembolism (4.9% vs. 0.8%, p<0.01), blood transfusions (25.3% vs. 7.0%, p<0.01), non-renal major medical complications (40.0% vs. 8.4%), and longer hospital stay (9.2 vs. 3.8 days, p<0.01). Multivariate logistic regression analysis controlling for age, race, sex, hospital type, insurance status and comorbidities, demonstrated that ESRD was independently associated with increased risk of venous thromboembolism (OR 2.38, 95%-CI 1.48–3.83), non-renal major medical complications (OR 1.51, 95%-CI 1.19–1.91), and in-hospital mortality (OR 6.88, 95%-CI 3.50–13.55). ESRD was not independently associated with increased rate of wound complications or blood transfusions.

**CONCLUSION:** ESRD patients present with significant medical comorbidities and experience higher rates of wound, thromboembolic, and medical complications following panniculectomy. After risk-adjustment for demographic factors and comorbidities, ESRD is independently associated with increased risk of thromboembolic and medical complications, as well as perioperative mortality. Plastic surgeons should carefully discuss risks and benefits of panniculectomy with these patients and work in a multidisciplinary fashion to optimize perioperative management.

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**Post-Operative Complications in the Massive Weight Loss Patient: Discrepancies of Perception**

**Presenter: Rachel Ann Guest, BA**

**Co-Authors: Danielle M. Minter, PhD; Autumn Groscost, PA-C; Jeffrey Gusenoff, MD**

**Affiliation: University of Pittsburgh, Pittsburgh, PA**

**INTRODUCTION:** Informed consent is a time consuming process, and for massive weight loss patients there is often a long list of potential complications. Patients are often overwhelmed by the amount of information provided, and may be compelled to sign without truly understanding important concepts, such as risk of post-operative complications.1 By determining where discrepancies lie between physician and patient understanding of complications, and by determining patient risk factors which predispose to suboptimal understanding of risk for post-operative complications, we can diminish this gap.

**METHODS:** 40 massive weight loss patients completed a short complication survey pre-operatively and at 1-month and 3-months post-operatively. 22 medical professionals evaluated the complications for comparison.

**RESULTS:** Physicians perceived most complications as significantly less severe compared to patients. At the pre-operative visit, prior to final pre-operative counseling, patients felt that delayed wound healing (p=7E-10), suture
extrusion (p=.00001), infection (p=.0001), necrosis (p=.0001), dehiscence (p=.001), and hematoma (p=.007), were more severe compared to how physicians viewed the same complications. Perception of death, DVT/PE, and return to the operating room did not vary significantly. Age did not impact complication perception. Patients seeking body contouring surgery with a primary goal of improved aesthetics compared to improved functionality were likely to view hematoma (p=.08) and dehiscence (p=.06) as more severe, although this did not reach significance. Patients who lost weight through diet and exercise, compared to surgical methods, were significantly more likely to view dehiscence (p=.04), hematoma (p=.01), and infection (p=.04), as more severe.

CONCLUSION: A discrepancy exists between what surgeons and patients perceive as significant post-operative complications in body contouring surgery, with the greatest discrepancy being for wound healing complications. Age and motivation for surgery did not reliably predict complication perception, while complication perception could be predicted by method of weight loss. Patients ultimately feared the worst when it came to post-operative complications, thus emphasizing the need for detailed pre-operative counseling and patient education prior to undergoing surgery.

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Efficacy, Safety and Costs of 0.1% Timolol Gel in Healing Split-Thickness Skin Grafts Donor Sites. A Case-Control Study

**Presenter:** Michelangelo Vestita, MD

**Co-Authors:** Giulio Maggio, MD; Angela Filoni, MD; Domenico Bonamonte, MD, PhD; Giuseppe Giudice, MD

**Affiliation:** University of Bari, Bari

INTRODUCTION: Split-thickness skin graft is one of the most commonly performed procedures in plastic and burn surgery, and effectively creates a secondary wound at risk for infection or delayed wound healing. The aim of this study was to assess the efficacy and safety of topical 0.1% timolol gel in promoting wound healing in split-thickness skin graft donor sites.

**METHODS:** We designed a prospective case control study to evaluate the effects of 0.1% timolol gel in healing skin graft donor sites when compared to paraffin gauze. A total of 42 burn patients were treated with either daily dressings with 0.1% timolol gel (1 fingertip unit every 2 cm²) and paraffin gauzes (case group), or to dressings every 4 days with paraffin gauzes (control group). Healing time, infection rate and patient’s pain perception were assessed by a blinded physician. Costs were also evaluated in both groups. Vancouver Scar Scale (VSS) and patient satisfaction VAS were recorded at the 6 months follow up.

**RESULTS:** A statistically significant improvement in terms of healing time was found in the timolol group (mean 6.4 days vs 12.7 days in the control group). The infection rate was the same. Significantly decreased pain perception was recorded in the case group. Total cost of the treatment was significantly higher in the case group. At the 6 months follow up VSS and patient VAS were significantly lower in the case group.

**CONCLUSION:** The role of topical beta-blockers in promoting wound healing is currently emerging in the international literature. Various experimental approaches to optimize the healing of split-thickness skin graft donor sites have been described, including back-grafting, however, no clearly superior and easily applicable method has gained wide acceptance in daily practice. 0.1% timolol gel may represent a commercially available, safe and simple, painless and moderately expensive treatment for improving skin graft donor site healing.

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