Development of infection was associated with longer periods from initiation of NPWT use to definitive soft tissue coverage (p<0.01); this finding was independent of time from injury to soft tissue coverage but correlated with number of operations. Limb salvage rate was 95.9% and 50.0% of patient could ambulate without an assistance device 3 or more months out of surgery.

CONCLUSION: Antibiotic beads may be more effective than negative pressure wound therapy in preventing infections in patients awaiting soft tissue coverage of wounds. Utilizing these treatments together does not improve infection rates. Limb salvage was successful in most cases regardless of treatment.

The Use of Negative Pressure Wound Therapy in Skin-Containing Free Tissue Transfer

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INTRODUCTION: Initially introduced for wound management, the benefits of negative pressure wound therapy (NPWT) have stimulated the investigation of its use in new clinical scenarios. Most recently, incisional NPWT has been shown to be beneficial. Incisional NPWT applied to skin containing free tissue transfer has not been well defined. This may originate from concerns of dressing material obscuring frequent examination of the newly transferred tissue or risk of pedicle compression and potential for increased risk of tissue loss. Our aim is to describe NPWT in fasciocutaneous free tissue transfer.

METHODS: An IRB-approved retrospective review of consecutive free tissue transfer patients was completed over a 3-year period. After fixation of the free flap, one or two drains were inserted in the sub-flap position. The surface of the flap was protected with vaseline gauze followed by a layer of sterile cotton. The V.A.C. (KCI, Texas, USA) was applied and NPWT was initiated at -125 mm Hg. A window was routinely made over the flap’s distal region to allow for serial flap examination. For extremity procedures, no splints were utilized. NPWT was employed continuously for 7 days and subsequently removed along with operative drains.

RESULTS: A total of 24 consecutive patients underwent fasciocutaneous free tissue transfer with a mean follow-up of 8.1 months. The average patient age was 39.8 years with mean BMI of 23. Tobacco use was noted in 58% of patients. The indications for the free tissue transfer included trauma, malignancy, and burn reconstruction. The areas of reconstruction included scalp, lower extremity, and upper extremity. Free flaps consisted of latissimus dorsi myocutaneous, anterolateral thigh, thoracodorsal artery perforator, and radial forearm free flap. The average defect size reconstructed was 238.3 cm² with a mean operative time of 501 minutes. Postoperatively, patients remained in the hospital an average of 15.5 days. No hematomas, seromas, surgical site infections, or DVT/PE occurred in the series. None of the flaps required return to the OR. There were no documented cases with partial or complete flap loss.

CONCLUSION: NPWT may be employed in a fashion similar to standard incisional application. With this technique, serial flap examination remains possible and is not associated with pedicle compression or increased rates of flap loss.

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Panniculectomy Outcomes in Patients with End Stage Renal Disease

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**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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**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...