

Panniculectomy in Renal Transplant Candidates: A High Complication Rate Yields a Higher Reward

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Background: Renal transplant candidates are frequently declined access to transplantation secondary to obesity and poor functional status. To maintain candidacy on the transplant waiting list, these patients are often required to lose significant weight. Substantial weight loss commonly produces a panniculus, generating a transplant site at high-risk for wound complications, blocking access to this life-extending kidney transplant. To decrease post-transplant wound and graft complications, we implemented a Transplant/Plastic Surgery Program where patients underwent panniculectomy in an effort to regain candidacy on the renal transplant waiting list.

Methods: We performed a retrospective review of all patients deemed high-risk for post-kidney transplant wound complications who underwent panniculectomy in preparation for renal transplantation at our institution from 2008 to 2016. All patients had a minimum of 3 months follow-up. Patient characteristics (age, BMI, medical comorbidities, maximum BMI and weight lost prior to panniculectomy) and surgical outcomes (specimen weight, operation length, time to drain removal, wound complications, time to treat complication) were analyzed after panniculectomy as well as after transplantation.

Results: We performed 41 panniculectomies in renal transplant candidates. Wound complications occurred in 22 patients (54%). Minor wound complications (wound separation, cellulitis, skin necrosis) occurred in 15 patients (37%), major wound complications (hematoma, seroma, abscess, unplanned return to the operating room) occurred in 7 patients (17%). Median complication treatment length was 32 days (range, 5-125). No patient lost time accrued on the transplant waiting list as a result of the procedure or complications. 19 patients have since undergone renal transplantation. One patient (5%) had a post-transplant wound complication resolving within 21 days (hematoma requiring return to operating room).

Conclusions: Panniculectomy in preparation for renal transplantation can be performed in patients with end-stage renal disease with a high but manageable complication rate, converting previously ineligible patients into eligible candidates for kidney transplantation. These wound complications are more easily managed prior to institution of immunosuppression required for renal transplant. While performing panniculectomies in these high-risk patients clearly shifts the burden of complications from Transplant Surgery to Plastic Surgery, it improves patient access to a life-extending procedure, further supporting Plastic Surgery's vital role in our comprehensive healthcare system.