Brief Reports

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In general, authors of case reports should use the Brief Report format.

Laparoscopic Sleeve Gastrectomy after Simultaneous Pancreas-Kidney Transplant

Diabetes mellitus (DM) is the leading cause of end-stage renal disease in the United States. The treatment of choice for patients with diabetic nephropathy is a simultaneous pancreas–kidney (SPK) transplant. Obesity negatively impacts posttransplant patients through increased infection rates, graft loss, and death.[1] To prevent such complications, bariatric surgery has been successfully used and reported in the surgical literature.[2, 3] We describe a case of laparoscopic vertical sleeve gastrectomy (LSG) after an SPK transplant in a morbidly obese patient. To our knowledge, this is the first such reported case in the English language surgical literature.

The patient is a 52-year-old man with a history of morbid obesity, DM, nephropathy, obstructive sleep apnea, gastroesophageal reflux disease, hypertension, hyperlipidemia, degenerative joint disease, deep venous thrombosis requiring caval filter, and at least two prior laparotomies for ventral hernia repair and associated complications. He had underwent an SPK transplant in July 2002. The patient had an uneventful early postoperative course until 6 years later when he developed pancreas graft failure with resultant insulin-dependent DM. Having tried and failed multiple weight loss programs, the patient was referred to us for bariatric surgery. His presentation body mass index (BMI) and weight were 45 kg/m^2 and 264 pounds, respectively. After a thorough preoperative workup, he underwent a laparoscopic vertical sleeve gastrectomy and extensive lysis of adhesions. His hospital course was remarkable only for mild nosocomial pneumonia. He was discharged after 4 days and his surgical postoperative course over the ensuing 4 months remained uneventful. The patient's weight, BMI, renal function, hemoglobin A1c levels, and insulin/immunosuppressive medication doses post-SPK transplant, pre-LSG, and post-LSG are shown in Table 1. T1

Multiple studies have demonstrated the opposing impacts of obesity and bariatric surgery on transplant patient outcomes. By offering many of the benefits of the more established bariatric operations *sans* their known short or long-term complications, LSG can be used in these unique situations. In the absence of any intestinal bypass component, the absorption of the usual plethora of posttransplant medications will not be impeded. Placement of adjustable gastric bands (AGBs) in immunosuppressed patients, furthermore, is contraindicated by their respective manufacturers. Additionally, compared with AGB, LSG has a lower reoperation rate and a higher degree of overall weight loss and resolution of comorbidities.[4]

Our case demonstrates the safety of LSG after SPK transplant. Longer-term follow-up, however, is needed to confirm its continued effectiveness in this unique patient population.

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TABLE 1. *Weight, Renal Function, Pancreas Function, and Medication Doses Post-SPK Transplant, Pre-LSG, and Post-LSG*

	Weight (pounds)/ BMI (kg/m^2)	BUN/Cr	HgBA1c	Lantus® (units)	Novolog® (units)	Prograf® (mg)	Prednisone (mg)	Cellcept® (mg)
Post-SPK	264/45.3	15/0.9	7.6%	None	None	1 BID	5 daily	500 BID
Pre-LSG	259/44.5	6/0.8	7.8%	40/50	20	2/1 AM/PM	5 daily	750 BID
Post-LSG	235/40.3	—/0.8	6.9%	40/36	18	2/1 AM/PM	5 daily	750 BID

SPK, simultaneous pancreas–kidney; LSG, laparoscopic vertical sleeve gastrectomy; BUN, blood urea nitrogen (mg/dL); Cr, creatinine (mg/dL); HgBA1c, hemoglobin A1c; BID, twice a day; —, not available.