

group. One patient was re-operated in Basel for chylothorax. Neither unit's patients needed blood transfusions. Hospital stay was significantly shorter in the Tygerberg group (3.2 vs. 10.4 days $p < 0.001$). No deaths occurred in either group.

Conclusions: Retroperitoneoscopic donor nephrectomy appears a safe technique to teach from a first world country to an African country. Comparing both learning curves varied very little. No clinical significant differences were identified.

MP-18.17

Assessment of Predictive Factors of Urological Complications in a Consecutive Series of 738 Renal Transplants at a Single Centre

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Introduction and Objective: Urological complications (UCs) after renal transplantation (RT) may increase morbidity, delay graft function, and occasionally lead to graft. We analyze the incidence of UCs and their impact on long-term graft and patient outcomes. We also assessed donor and recipient variables to identify significant risk factors for UCs.

Materials and Methods: We retrospectively analyzed a series of 738 RTs performed at our centre between November 1998

and July 2010. Renal grafts were obtained from living-related donors in 20 and from cadaveric donors in 718 cases. Dual transplants were 35. A Lich-Gregoire ureterovesical anastomosis over a ureteral stent was carried out in all cases. Graft recipient and donor characteristics, perioperative variables, occurrence and type of complications, graft and patients outcomes were recorded in a database. Univariable and multivariable logistic regression analysis was performed to identify risk factors for UCs. Survival curves were generated using the Kaplan–Meier method.

Results: With a median follow-up of 4.8 years (IQR 2.5-7.7), 100 UCs in 91 patients were observed: 30 ureteral obstruction, 14 ureteropelvic junction obstruction, 17 urinary leaks, 32 lymphoceles and 7 surgical wound complications. Urinary leaks were the earliest complications to be detected after RT (17.5 days on average). Univariable analysis showed a significant association between UCs and: donor age ≥ 50 years ($p=0.03$), recipient age ≥ 50 years ($p=0.02$), delayed graft function ($p=0.04$), dual transplant ($p=0.002$) and serum creatinine at 6 months $\geq 2\text{mg/dl}$ ($p=0.01$). At multivariable analysis only dual transplant confirmed a significant association with UCs (OR 2.6; IC95% 1.14-5.92). Overall, graft failure occurred in 12 patients with UCs. Three patients died for a cause that was not correlated with the UC. Five-year graft and patient survival in subjects with

UCs was 88.9% and 98.7%, respectively.

Conclusions: The incidence of UCs at our centre is similar to that reported in literature. Dual transplant was the only independent predictive variable associated with the onset of UCs. No significant reduction in graft and patient survival was observed in patients with UCs. In our experience a timely diagnosis and adequate treatment of UCs seem to avoid a significant impact on graft and patient outcomes.

MP-18.18

Is Laparoscopic Living Donor Nephrectomy in Patients with Vascular Anomalies Safe and Effective?

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Introduction and Objective: Laparoscopic living donor nephrectomy (LLDN) requires a challenging learning curve. In the initial part of a surgeon's experience, LLDN can potentially lead to higher morbidity and longer warm ischemia time. We assessed morbidity and outcomes of LLDN in presence of donor's vascular anomalies during the learning curve of a single surgeon.

Materials and Methods: From January 2006 to March 2011, 23 patients underwent LLDN at our centre. The left kidney

MP-18.18, Table 1. Demographic, intraoperative and postoperative variables of donors

	Group A	Group B	p value
No. Gender (%)			
male	2 (25)	5 (33.3)	-
female	6 (75)	10 (66.6)	
Median age (years)	55.5 (49.5-59)	53 (50-64)	n.s.
BMI (kg/m ²)	23.75 (22.15-25.4)	24.85(22.6-25.4)	n.s.
Median operative time (min)	227.5 (165-270)	210 (180-235)	n.s.
Median warm ischemia time (s)	140 (120-200)	145 (110-180)	n.s.
Median length of hospitalization (days)	9 (9-11.5)	8 (6-9)	<0.05
Median creatinine at the discharge (mg/dl)	1.3 (1.15-1.4)	1.2 (1-1.5)	n.s. MP-18.18,

MP-18.18, Table 2. Demographic and postoperative data of recipients

	Group A	Group B	p value
Median age (year)	44.5 (30-53.5)	37 (27-45)	n.s.
BMI (kg/m ²)	21.65 (20.5-23.7)	23.5 (22.8-24.1)	n.s.
Pre-allograft dialysis rate (%)	50.0	53.3	n.s.
Median postoperative crs at 1 day (mg/dl)	3.15 (2.1-5.75)	2.4 (2-5.7)	n.s.
Median postoperative crs at 3 day (mg/dl)	1.7 (1.4-3.65)	1.7 (1.5-2.9)	n.s.
Median postoperative crs at the discharge (mg/dl)	1.6 (1.35-2.05)	1.5 (1.3-2)	n.s.
Median eGFR at 6 months (ml/min)	71.0 (44-74)	63.0 (57-80)	n.s.
Median eGFR at 12 months (ml/min)	64.0 (61-74)	73.0 (56-81)	n.s.

was always preferred and a classic transperitoneal approach with 4 trocars was used. Preoperative, intraoperative, and postoperative variables were assessed for all patients. Morbidity and outcomes of cases with presence (group A, n=8) or absence (group B, n=15) of donor's renal vascular anomalies at preoperative CT scan were compared. Statistical analysis was performed using Mann-Whitney U and Chi-squared test as appropriate.

Results: Preoperative imaging revealed 10 left kidney vascular anomalies in 8 grafts: early main arterial branches division (n=2), double renal artery (n=6), retroaortic renal vein (n=1) and shorter left renal vein in aorto-caval transposition (n=1). The characteristics of LLDN donors and recipients are shown in Table 1-2. No significant differences in intraoperative and postoperative variables as well as in the rate of complications were observed between group A and group B (Table 1-2). No grafts were lost and no recipient returned to dialysis with a median follow-up of 31 months (IQR 11-46).

Conclusions: The presence of vascular anomalies does not have a significant impact on morbidity and outcomes of donors and recipients during LLDN learning curve.

MP-18.19

Subcutaneous Prosthetic Ureter in Kidney Transplant Patients

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Introduction and Objective: We evaluated the efficacy and complications of using subcutaneous prosthetic ureters as a salvage procedure in transplanted kidneys with recurrent ureteral obstruction. There are rarely reports in this regard.

Materials and Methods: Seven subcutaneous prosthetic ureters were inserted in 7 kidney recipients who had recurrent ureteral stenosis and failed endoscopic and open reconstructive surgeries. The prosthetic ureter consisted of an internal silicone tube covered by a coiled e-PTFE tube. The proximal end of tube was introduced in the transplanted kidney percutaneously. The tube was passed through a subcutaneous tunnel and the distal end was inserted in the bladder through a small suprapubic incision.

Results: Mean follow-up period was 19.4 months. One of the patients reoperated two days after operation because of urinary leakage from the distal end of prosthetic ureter. One case had recurrent urinary infections. No case of tube encrustation was encountered.

Conclusions: Subcutaneous prosthetic ureter is a safe alternative for permanent percutaneous nephrostomy in transplanted kidneys with obstructed ureter and failed endoscopic and open procedures.

MP-18.20

Does the Laparoscopic Nephrectomy Donor Leave the Hospital Earlier than the Open Nephrectomy Donor?

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Introduction and Objectives: Kidney transplantation is the best treatment for chronic renal failure (CRF). In this treat-

ment not only the patient will have a normal life but also the kidney transplantation is more cost-effective than other treatment of CRF. One of the major problems in the kidney transplantation is the shortage of the kidney donor. For solving the problem of kidney donor shortage, besides the deceased donor, live kidney donors (related and unrelated) are selected. Two approaches are used for removing kidneys from live donors including: open nephrectomy and laparoscopic nephrectomy. One of the advantages of laparoscopic donor nephrectomy is the early discharge of the donor from the hospital. At our center, we have studied the issue: does the open nephrectomy donor leave the hospital with more delay than the laparoscopic donor nephrectomy?

Materials and Methods: The time of hospital stay of 326 kidney donors (35 females, 291 males) post-operation have been studied retrospectively at the kidney transplant center of Imam Reza hospital from 2005 to 2011.

Results: In 326 kidney donors, 48 donors left the hospital the second day following the operation, 276 donors on the third day following the operation, one donor on the eighth day following the operation, and one donor on the sixth day following the operation. In all the kidney donors the operation was done through trans flank incision and retroperitoneal and without the rib resection.

Conclusions: In this study, considering the hospital stay time of open nephrectomy donors, it is understood that nearly hundred percent of donors had left the hospital the third day following the operation, so it seems that the hospital stay duration for the open nephrectomy donors is comparable with the hospital stay time of laparoscopic nephrectomy donors.