

Transplant surgery

0207: RENAL TRANSPLANTATION USING DONOR GRAFTS WITH COMPLETE URETERAL DUPLICATION

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Aim: Renal transplantation with duplication of the ureter is seldom reported. Multiple renal arteries or veins are more common. The purpose of this study was to evaluate the outcome of renal transplants using donor grafts with complete ureteral duplication.

Method: From 1975–2015 over 2000 patients received a renal transplant. Since 1990 eleven patients, eight male, mean age 54.8 +/- 13.05 SD years, received renal transplants from donors with complete ureteral duplication. Eight were allocated by the National UK Transplant Scheme and three were from live donors. In eight patients the ureters were implanted separately at the bladder dome using an onlay extravesical ureteroneocystostomy (modified Lich technique) each with a separate J-J stent which was removed at 6 weeks according to protocol. In three patients the two ureters were spatulated and sutured together. Five donor kidneys had duplication of the renal vessels.

Result: There was no history of functional impairment, recurrent urinary tract infection, ureteric strictures or leaks or graft loss. Two patients had previous renal transplants.

Conclusion: Donor kidneys with ureteral duplication may be used for transplantation and did not increase complication rates. They yielded equal outcomes to single ureter donor kidneys. The Lich-Gregoir technique may provide excellent results.

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0467: THE USE OF TRANEXAMIC ACID IN THE PERIOPERATIVE MANAGEMENT OF PATIENTS UNDERGOING ORTHOTOPIC LIVER TRANSPLANTATION

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Introduction: Haemorrhage is a major cause of mortality following orthotopic liver transplantation (OLT). Antifibrinolytics e.g. aprotinin could be administered to reduce blood loss and lower risks associated with transfusion. Although aprotinin used to be the standard antifibrinolytic administered in OLT, its use has been associated with higher mortality risk.

Aim: To investigate whether antifibrinolytic tranexamic acid (TA) is justifiable as a substitute to aprotinin in routine OLT.

Method: Four databases – Medline, Embase, Scopus and Web of Science – were used to find relevant studies. The inclusion criteria ensured that studies were full clinical trials comparing TA with placebo/other antifibrinolytics.

Result: Seven studies met the inclusion criteria. Results were qualitatively categorised into the effects of TA on blood loss, transfusion requirements, coagulation, and adverse effects such as mortality.

Discussion: TA significantly reduces blood loss and transfusion requirements and is better at coagulation compared to placebo. While its ability to reduce blood loss and transfusion requirements pales in comparison to aprotinin, it is better at achieving coagulation than aprotinin. None of the studies were sufficiently powered to measure safety and mortality.

Conclusion: TA is a viable alternative in OLT that would be more beneficial than forgoing the administration of an antifibrinolytic.

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0468: LIVING ORGAN VERSUS CADAVERIC DONATION: A COMPARISON OF OUTCOMES FOLLOWING RENAL TRANSPLANTATION ACCORDING TO RECIPIENT BODY MASS INDEX AND DONATION TYPE

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Aim: This study aims to determine whether a combination of donation type and obesity (Body Mass Index $\geq 30\text{kg/m}^2$) can affect outcomes following renal transplant.

Method: A consecutive series of renal transplants (2008–2013) were audited with patients divided into three cohorts based on BMI (kg/m^2) [Cohort A <25, B 25–29.99, C ≥ 30] and then Living vs. Cadaveric donation. We recorded perioperative complications within 90 days and graft survival at 3 years.

Result: Sample = 610 transplant recipients (living donation = 275, cadaveric donation = 335, excluded = 24). -One-way ANOVA proved significant ($p=0.024$, $F=3.764$) for number of complications per patient in Cohort C (average = 1.5) in comparison to Cohort A (average = 1.0) for transplants with cadaveric donation only ($p=0.014$ Bonferroni-adjusted). -For complication type, chi-square proved significant for Collection ($p=0.009$) and Lymphocele ($p=0.005$) for transplants with cadaveric donation. -Graft survival: Censored data shows a minimum 7% increase at 3 years for living donation transplants in any BMI cohort in comparison to cadaveric donation.

Conclusion: Short-term: the combination of cadaveric kidney donation and obese recipient should be viewed as higher risk, with additional informed consenting and multidisciplinary planning. Long-term: living organ donation appears substantially better in terms of graft survival and obesity does not appear to have an effect.

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0580: ALEMTUZUMAB INDUCTION ALLOWS BETTER REJECTION FREE GRAFT SURVIVAL INCOMPARISON TO BASILIXIMAB ALBEIT INCREASED POST TRANSPLANT VIRALINFECTIONS

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Background: 3C study concluded that in comparison to basiliximab, alemtuzumab induction reduces the risk of biopsy proven acute rejection (BPAR) in renal transplant recipients.

Aim: To compare alemtuzumab and basiliximab induction followed by standard two drug maintenance immunosuppression to assess rejection & infection rate.

Method: Data was collected retrospectively from patients transplanted between 1/08/2009 to 31/12/2013. 436 patients were analyzed; 235 received basiliximab, 198 received alemtuzumab & data was not available for 3 patients. Tacrolimus and mycophenolate mofetil were used as maintenance immunosuppression in both groups.

Result: Review of the data showed no significant differences for demographic details, graft & patient survival. Basiliximab group had increased incidence of BPAR, 22.1% as compared to Alemtuzumab, 7.5% (Yates correction <0.001 , Fischers Exact test one tailed $p<0.0001$). Median creatinine level at 6 weeks was $128 \pm 21 \mu\text{mol/L}$ (Basiliximab) & $115 \pm 16 \mu\text{mol/L}$ (Alemtuzumab). However, incidence of Viral infections was higher in the Alemtuzumab group vs Basiliximab (Fischer Exact test one tailed $p<0.0002$, Pearson Test $p<0.0004$).

Conclusion: Alemtuzumab induction significantly reduces the incidence of rejection but at the cost of increased viral infections. Our Study corroborates the 3C Trial findings. Further review of data over time will assess long term graft outcomes.

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