Posters: Transplant Surgery

0068: DEMOGRAPHIC FEATURES AND OUTCOME MEASURES FOR UNDERWEIGHT RENAL TRANSPLANT RECIPIENTS: A SINGLE CENTRE TEN-YEAR EXPERIENCE

S. Ebbs 1, 2, J. Nath 2, B. Osman 2, M. Frank 1, A. Ready 2. 1 University of Birmingham, UK; 2 University Hospital Birmingham NHS Foundation Trust, UK

Aim: Obesity is increasing in the renal transplant population provoking significant clinical interest. However, outcomes for overweight (BMI ≥ 18.5 kg/m²) patients have been poorly defined. We present our ten-year experience of overweight transplant recipients including functional outcomes.

Methods: Consecutive adult patients undergoing renal transplantation (January 2004-January 2014) at the Queen Elizabeth Hospital, Birmingham were included and divided into two groups (BMI < 18.5 and BMI > 18.5). Demographic features and graft outcomes were obtained from a contemporaneously maintained database.

Results: 33 of 1095 patients (3.01%) were underweight. These tended to be female (60.6% vs 40.2% p < 0.001) and young (mean age 27.0 vs 46.7 p < 0.001). 1-year graft and patient survival values were similar for underweight and non-underweight groups (90.0% vs 90.5% (p = 0.005) and 97.0% vs 98.6% (p = 0.460) respectively). Median creatinine at 12 months was lower for the underweight group (107 μmol/L (88–135) vs 129 μmol/L (105–162) p < 0.001).

Conclusion: Underweight renal transplant recipients are not representative of the overall transplant population and are more likely to be young females. However such patients have excellent outcomes with comparable graft and patient survival to non-underweight counterparts. Whilst absolute creatinine values are lower in underweight patients, this may reflect lower muscle mass and necessitates further study.

0088: NEW ONSET DIABETES AFTER TRANSPLANTATION: IS IT A BIG DEAL? RISK FACTORS AND IMPACT AFTER KIDNEY TRANSPLANTATION. A SINGLE CENTRE EXPERIENCE

J. Worsfold 1, 2, L. Harris 1, E. Aboutaleb 2, E. Favi 2, R. Cacciola 2, C. Pulitti 1, C. Sammartino 2, R. Sivaprasakasam 2. 1 Barts and the London School of Medicine and Dentistry, UK; 2 The Royal London Hospital, UK

Aim: New Onset Diabetes after Transplantation (NODAT) can affect graft and patient survival following renal transplantation. But there’s a lack of evidence in its effect on ethnic minority; in particular transplant patients from Indian Sub-continent (ISC). We have reviewed our experience to address this issue.

Methods: The data was collected from a prospectively collated database from a single centre between 2007–2013. The data collected included donor and recipient variables- age, sex, type of donor, ethnicity, BMI, comorbidities, cold ischemia time, graft and patient survival. A univariate and multivariate analysis were performed using SPSS.

Results: A total of 639 patients were included in this population, 294 (46.1%) Caucasians and 345 (53.9 %) non-Caucasians with a mean age at transplant of 45.6± 12.3. During a mean follow-up of 4.55 years, 62 (9.7%) of the patients had NODAT, 16 (25.8%) were Caucasian and 43 (69.4%) were non-Caucasian. The significant risk factors are recipient age, from Indian sub-continent, deceased donors and recipient body mass index and no significant difference was found in Co-variables.

Conclusion: Increased incidence of NODAT was found in the renal transplant patients from ISC and despite published evidences; there is no significant effect on the graft and patient survival following transplantation.

0118: KNOWLEDGE AND OPINIONS HELD BY BRITISH AND CANADIAN SIKHS REGARDING SOLID ORGAN AND STEM CELL TRANSPLANTATION

R.S. Andev 1, M. Field. University of Birmingham, UK

Aim: British and Canadian Sikh membership to the stem cell and organ donation registers are low. Previously, Sikhs were studied collectively with the other heterogeneous South Asian communities, creating unfocussed results. Recent British stem cell campaigns have spurred a 1,200% increase of South Asians on the register possibly due to targeted campaigns.

Methods: Our online questionnaire assessed stem cell and organ donation knowledge and belief among Sikhs.

Results: Organ donation registry is similar for British (35.5%, n = 43) and Canadian Sikhs (36.0%, n = 40). However, British Sikhs are more likely to be stem cell donor registrants (28.1%, n = 34) compared to Canadians (13.5%, n = 15). The main reason British Sikhs joined the stem cell register was due to a targeted campaign (45%, n = 54). Knowledge on stem cell donation is poor compared to organ donation (p < 0.01). The main reason for lack of registration to either the stem cell or organ donation register is having ‘never considered’ joining, at 69% (n = 161) and 52% (n = 121) respectively.

Conclusion: There are increased numbers of British Sikhs on the stem cell register but they appear to know less. Targeted campaigns could increase membership, but this needs to be balanced with a good knowledge base for registry.

0172: PATTERNS OF CMV INFECTION POST RENAL TRANSPLANT

A. Sheldon 1, P. Thomson, M. Clancy. University of Glasgow, UK

Aim: CMV infection post renal transplant is most common in seronegative recipients of seropositive donors (Donor+/Recipient-) leading to widespread use of antiviral prophylaxis. Non-prophylaxed, combinations manifest a lower incidence. We evaluate incidence and timing of CMV viremia and disease in all donor/recipient serological combinations.

Methods: This study included consecutive renal transplant patients 1/7/10-30/6/13 with a minimum of 1 year follow-up. Demographic data, donor/recipient pre-transplant CMV status, and post-transplant CMV PCR were extracted from a prospectively compiled, electronic patient record. Time to CMV DNA PCR positivity was calculated in all groups.

Results: Pre-transplant CMV status was established for 294/335 (87.7%) transplantations. 23.5% (69/294) were in the prophylaxis group (D+/R–). 43.5% (30/69) of the prophylaxis group encountered CMV viremia post-transplant [27.5% (19/69) symptomatic] versus 8.3% (20/225) in the non-prophylaxis group [1.8% (4/225) symptomatic]. Peak incidence of CMV viremia was at 90-days in the non-prophylaxis group compared to 270 days post-transplant in the prophylaxis group.

Conclusion: CMV viremia occurs in the high risk group despite prophylaxis but mostly later than 6 months post transplant. Clinicians should maintain a high level of clinical suspicion for CMV infection in non-prophylaxed patients early post-transplant. In prophylaxed patients, infection is more likely 6–18 months post-transplant.

0390: DEALING WITH THE DEFICIT: SEROPOSITIVE-TO-SEROPOSITIVE ORGAN TRANSPLANTATION IN PATIENTS WITH HIV

M.J. Hussain 1. Central Manchester University Hospital Foundation Trust, UK

Aim: In the HAART-age, survival has improved amongst patients with HIV. A new ageing population has emerged with chronic conditions, necessitating the need for organ transplantation. Organ transplantation in seropositive recipients has shown comparable patient and graft survival compared to seronegative recipients. But the donor pool is limited.

Methods: Multiple databases were systematically searched (inception to October 2014) using keywords: HIV-positive, Recipient, Donor, Transplantation, Kidney, Pancreas.

Results: Limited data exists evaluating the viability and prospect of seropositive-seropositive organ transplantation. To date 14 seropositive-seropositive renal transplants, using anti-thymocyte globulin induction therapy have been reported with good graft function and dialysis-free at 12 months. Over 60% of seropositive individuals are agreeable to organ donation, with 55% open to receiving seropositive organs. Concerns of infection, quality of organ and confidentiality were barriers to seropositive-seropositive organ transplantation. Uncertainty and stigma still exists around performing transplants in seropositive recipients among transplant practitioners.
Conclusion: Transplantation of seropositive organs increases the donor pool and provides benefit in resource-limited settings for patients with HIV. Several theoretical concerns exist of a ‘Trojan horse’ effect of the transplanted organs super-infecting the recipient with other infectious diseases. Prospective trials are needed to evaluate the safety and effectiveness of seropositive-seropositive organ transplantation.

0601: BLADDER VERSUS ENTERIC DRAINAGE FOLLOWING PANCREAS TRANSPLANTATION

N. Senaratne1, J. Norris1. Addenbrooke’s Hospital, UK

Aim: The optimal technique for exocrine drainage after pancreas transplantation is unclear. Bladder drainage (BD) involves fewer technical complications than enteric drainage (ED) but risks urological and metabolic complications post-surgery. We evaluated whether graft survival is greater with BD or ED after pancreas transplantation alone (PTA).

Methods: A literature review was undertaken using the Medline database 1948–2014 with the PubMed interface: [(Bladder) AND (enteric) AND (drainage)] AND (pancreas) AND (transplant)]. Lab. The search was duplicate filtered. Reference lists of articles were also searched for additional references.

Results: 155 papers were identified, of which four retrospective cohort studies best answered the clinical question. Three demonstrated no significant difference in 1 year graft survival rate between ED and BD. One study indicated lower 1 year graft survival with ED (66% vs 75% BD; p = 0.02) due to a higher technical failure rate with enteric drainage (14.8% vs 3.9%; p = 0.04) but may be out of date in relation to advancing surgical techniques.

Conclusion: With modern transplantation techniques there is no significant difference in graft survival between ED and BD after PTA. Therefore ED represents the preferable technique for exocrine drainage over BD given its lower post-operative complication rate.

0693: META-ANALYSIS OF HAND-ASSISTED RETROPERITONEOSCOPIC NEPHRECTOMY VERSUS STANDARD LAPAROSCOPIC TECHNIQUE FOR LIVING DONOR NEPHRECTOMY

A. Negeda1, O. Mohamed1, G. El Ashal2, Y. Elfouly1, S. Mostafa3, A. Badr4, H. Gomaa5, O. Naser6, 1Zagazig University, Egypt; 2Cairo University, Egypt; 3Azhur University, Egypt; 4Menoufia University, Egypt; 5Tanta University Hospital, Egypt; 6West Wales General Hospital, UK

Aim: This meta-analysis aims at comparing hand-assisted retroperitoneoscopic nephrectomy (HARP) against the traditional laparoscopic technique (TLS) for living donor nephrectomy.

Methods: PubMed was searched for prospective studies comparing HARP and TLS using relevant search terms. Data were extracted from eligible studies and were analyzed using RevMan version 5.3 for windows. Subgroup analysis was used to stratify intraoperative complications on Clavien-Dindo score.

Results: Four studies (319 patients) were included in the final analysis. HARP was better than TLS in terms of surgery duration (SMD = −0.69, 95% CI = [−0.92, −0.46]) and blood loss (SMD = 0.19, 95% CI = [−0.06, 0.43]). The overall effect estimate did not differ significantly in terms of hospital stay (SMD = 0.02, 95% CI = [−0.20, 0.25]) or graft survival (RR = 0.97, 95% CI = [0.92, 1.02]). Intraoperative complications on Clavien-Dindo score did not favor either of the two groups (RR = 0.62, 95% CI = [0.31, 1.21]).

Conclusion: Hand assisted retroperitoneoscopic nephrectomy is better than the traditional laparoscopy for living donor nephrectomy. HARP is associated with shorter surgery duration, less bleeding and less warm ischemia time than TLS.

0706: COMPLICATIONS FOLLOWING LIGATION OF UPPER LIMB ANEURYSMAL ARTERIOVENOUS FISTULAE

M.A. Khurram1, C. Hall, V. Surendrakumar, V. Sivarajah, J.S. Crane. Imperial College London, UK

Aim: We highlight four cases as examples of complications that were direct consequence of simple “ligation” of an arteriovenous fistula (AVF) aneurysm.

Results: Malignancy: A thrombosed brachiocephalic fistula (BCF) presented with swelling proximal to ligation-site. Wide-local excision revealed grade III epithelioid angiosarcoma. Despite clear resection margins the patient developed pulmonary metastasis and died within year. Stump aneurysm: A BCF ligation led to a stump aneurysm with progressive enlargement. This was associated with thrombosis in the aneurysm which was subsequently excised. Thrombosis and distal embolisation: A ligated BCF presented with an acutely ischaemic hand due to thrombus in the brachial artery stump with distal embolization. This was managed with anticoagulation followed by excision and brachial artery reconstruction.

Conclusion: Simple ligation of an AVF may be necessary in an emergency situation, but in the majority of cases these patients remain asymptomatic post ligation. We would therefore advocate total excision with reconstruction of the feeding artery as first line treatment.

0857: EFFECT OF DONOR PERIOPERATIVE eGFR LEVELS ON RENAL TRANSPLANT OUTCOMES

K. Hureibi1, M. Ilham. University Hospital of Wales, UK

Aim: To evaluate the effect of donor eGFR levels pre- and post nephrectomy and correlate this with the transplant outcomes.

Methods: Retrospective analysis of living kidney donors and recipients at the Transplant Unit–Cardiff, June 2008–November 2013. Donor demographic data and eGFR levels at different time points (preoperative, lowest level postoperatively and at 3 months) were retrieved. Demographics were also recorded. Donor eGFR levels were correlated with graft function (eGFR at 1 year) and episodes of acute rejection and delayed graft function. Multivariable linear regression analysis considering independent donor (Age, Sex, BMI, and systolic BP) and recipient (age, sex, biological relation) variables was carried out with a level of significance < 0.05.

Results: 153 donors-recipients pairs were analysed after excluding 17 donors (moved away or altruistics). Donors (F = 89, M = 63, mean age 46), Recipients (M = 92 males, 62 females, mean age 43). Donor eGFR profiles had no correlation with AR or DGF using binary regression analysis (p > 0.05). On multivariable regression analysis, the only measurement of donor eGFR that correlates significantly with the graft function at 1 year was the donor eGFR at 3 months (slope = 0.303, p < 0.006).

Conclusion: Donor eGFR at 3 months is an independent determinant of post-transplant graft outcome. It has more significance than other donor eGFR profiles.

0858: DONOR AND RECIPIENT FACTORS THAT AFFECT GRAFT OUTCOMES IN LIVE DONOR KIDNEY TRANSPLANTATION: A SINGLE CENTRE EXPERIENCE

K. Hureibi1, M. Ilham. University Hospital of Wales, UK

Aim: To evaluate donor and recipient factors that might affect the outcomes in kidney live transplantations.

Methods: Retrospective analysis of 153 donors-recipients pairs at the transplant unit, Cardiff, June 2008–November 2013. The following data was retrieved: demographics of donors and recipients, baseline eGFR of donors, graft function at 1 year post transplantation and history of acute rejection (AR) or delayed graft function (DGF). Several donor and recipient factors were correlated to graft function at 1 year, AR and DGF.

Results: 17 patients were excluded as they moved away (n = 9) or were altruistic donors (n = 8). The remaining compromised 153 donors-recipients pairs (donors = 89 females and 63 males, mean age 46), (Recipients = 92 males, 62 females, mean age 43). Donor eGFR ≥ 50 ml/min (p = 0.03) and age (p = 0.05), and history of acute rejection (p = 0.05) were significant independent variables in predicting graft function at 1 year. This was also demonstrated by multivariable linear regression. Donor eGFR ≥ 50 ml/min was also associated with less incidence of DGF (p = 0.014) on binary regression analysis.