

**Conclusion:** Our results indicate the existence of a mitochondrial stress environment with a lasting negative impact on residual kidney-function at day 30 likely reflecting a renal-tubular dysfunction in the remaining kidney. Further biochemical analyses are ongoing to confirm the nature of this dysfunction allowing the targeting of timely interventions.

#### 0598: EFFECTS OF ENDOTHELIN RECEPTOR ANTAGONISM IN AN EXPERIMENTAL MODEL OF RENAL TRANSPLANTATION

K. Shah<sup>\*</sup>, S. Hosgood, M. Patel, M. Nicholson. *University of Leicester, UK*

**Aim:** Uncontrolled Donation after Circulatory Death (uDCD) donors provide a large potential source of kidneys but there is reluctance to use them due to prolonged warm ischaemic times. Endothelin-1, a potent vasoconstrictor, is a major contributor to ischaemic injury. This study aimed to investigate the benefit of endothelin receptor blockade in an experimental model of uDCD transplantation.

**Methods:** Porcine kidneys underwent 60 minutes warm ischaemia and 2 hours cold ischaemia followed by 3 hours of reperfusion with autologous blood without (control, n = 6) and with (n = 6) 500µg BQ-123, a selective ET<sub>A</sub> endothelin receptor antagonist. Markers of renal function and injury were analysed.

**Results:** Renal blood flow was significantly higher in the experimental group at 15–30 minutes of reperfusion (29.6–37.7 vs. 13.1–18.2 ml/min/100 g, p = 0.02), after which, although higher throughout, statistical significance was lost. Urine output, creatinine clearance and oxygen consumption were also higher in the experimental group throughout but statistical significance was only seen in the 1<sup>st</sup> hour urine output (83 vs. 32 ml/hr, p = 0.01). Urinary Neutrophil Gelatinase-Associated Lipocalin (NGAL) levels were not different between the groups.

**Conclusion:** Kidneys can recover from warm ischaemic injury. BQ-123 appeared to improve perfusion and function initially but did not have a sustained effect or significant overall benefit.

## Association of Surgeons of Great Britain & Ireland Short Paper Session

#### 0002: SURGICAL AND TRANSCATHETER CLOSURE OF CONGENITAL CORONARY FISTULAE: OUTCOMES FROM A NATIONAL AUDIT

D. Fudulu<sup>\*</sup>, D. Dorobantu, M. Caputo, S. Stoica. *Bristol Children's Hospital, UK*

**Aim:** To report short and long term outcomes after surgical and transcatheter correction of congenital coronary fistulas (CCF).

**Methods:** Using data from the UK Central Cardiac Audit Database we performed a retrospective analysis of all patients undergoing surgical or transcatheter correction of CCF between 2000 and 2012.

**Results:** Out of 81 patients (48.2% Male, 51.8% Female), 34 (42%) underwent surgical repair and 47 (58%) had transcatheter procedures. The median ages were 12.6 years for surgery (range, 0.08–68.2) and 7.8 years (range, 0.01–77.8) in the catheterization group. Mean follow-up times were: 5.3 years (range, 0–13.0) for the surgical group and 4.6 years (range, 0–12.7) for the catheter group. There was no 30-day mortality in the entire cohort. One-year mortality for the surgical group was 7.41% vs. 2.94% for the catheter group (p = 0.58). In the catheter group 4 patients (8.51%) required one or more reinterventions, compared to no reinterventions in the surgical cohort (p = 0.13).

**Conclusions:** CCF repair via transcatheter or surgical approach is attainable with no early mortality and good medium-term results. Careful patient selection would have to be partly responsible for these excellent national results. Reintervention is overall infrequent and it appears to be higher after transcatheter embolisation.

#### 0418: TRANS-VAGINAL DUPLEX ULTRASOUND FOR DETECTING PELVIC VEIN INCOMPETENCE IN WOMEN: A PILOT STUDY

V. Hansrani<sup>\*</sup>, D. Kotecha, K. Norse, C. McCollum. *University of Manchester, UK*

**Aim:** Pelvic vein incompetence (PVI) is diagnosed by reflux venography. This is invasive, nephrotoxic and involves ionizing radiation in young women. Trans-vaginal duplex ultrasound (TVU) is a non-invasive and entirely safe alternative. We compared TVU with reflux venography for the detection of PVI.

**Methods:** Women with clinical suspicion of PVI who attended for TVU and reflux venography were included in this study (n = 20). Sensitivity, specificity, positive and negative predictive value (PPV, NPV) were calculated for TVU with reflux venography as the 'gold standard'.

**Results:** 40-paired TVU and reflux venography images were analysed from 20 women, mean (range) age 45 (25–55). PVI was detected in all 20 images with TVU and 19 of 20 (95%) images with reflux venography. The sensitivity and PPV of TVU to detect PVI was 100% and 95% respectively. TVU identified left ovarian vein incompetence with a sensitivity and specificity of 78.6% and 66.7%; right ovarian vein incompetence with sensitivity and specificity of 71.4% and 100%; left internal iliac vein incompetence with sensitivity and specificity of 91.7% and 100%, and right internal iliac vein incompetence sensitivity and specificity of 70% and 90% respectively.

**Conclusion:** TVU is accurate and safe alternative to reflux venography in diagnosing of PVI.

#### 0719: LIVING KIDNEY DONATION IN THE ELDERLY: THE UK EXPERIENCE

R. Tamburrini<sup>\*</sup>, Z. Ahmed, A. Shafi, N. Kessar, N. Mamode. *Guy's Hospital, UK*

**Aim:** To investigate the feasibility of elderly patients into living-kidney-donor(LDN) programmes to understand if an upper age limit to donation should exist.

**Methods:** Details of 10,900 patients undergoing LDN in the UK from 2000–2013 were obtained. Patients were stratified into under 65 and 65+ years populations. Demographics, comorbidity burden, nature/incidence and severity of complications, renal function and proteinuria were analysed using univariate tests.

**Results:** 586(5.8%) 65+ underwent LDN during 13-year period. Elderly LDN increased from 2.29% to 11.08% during 13-year period(p = 0.000). Older donors were mainly white(96vs86% p = 0.00) with lower deprivation score(mean-IMD:14.9vs21.3 p = 0.001), hypertensive(15.8%vs7.12% p = 0.000), with lower comorbidity burden(ASA2+)(8.19%vs13.32% p = 0.00). BMI, sex and operative factors were similar in groups. The occurrence of minor(Clavien1,2:8.9vs10.1% p=0.353) and major(Clavien3+:2.39vs1.76% p = 0.263) complications were similar. Mean hospital-stay was equivalent(4.63vs4.42days, p = 0.12). Rises in Syst-BP(3.62vs1.56mmHg p = 0.02) and creatinine(36.7vs30.4 µmol p = 0.000) 1-year postdonation were greater in 65+. New onset proteinuria at 1-year was similar(3.41vs3.51% p = 0.433).

**Conclusion:** Elderly donors comprise an increasing proportion of the donor pool. Perioperative morbidity was similar to younger counterparts. Postoperative measures of cardiovascular risk were within acceptable limits. Continued and increasing use of elderly donors is acceptable, however further data on recipient outcomes assessing the impact on graft function is required.

#### 0776: CHANGE IN PRACTICE OVER FOUR DECADES: INCREASING USE OF RADIO-ACTIVE IODINE ABLATION BUT DECLINING RELIANCE ON SURGICAL ABLATION IN THE MANAGEMENT OF GRAVES' DISEASE

F. Ahmed<sup>1,\*</sup>, S. Dutta<sup>3</sup>, D.M. Smith<sup>2</sup>, M.A. Thaha<sup>4</sup>. <sup>1</sup>King's College London, UK; <sup>2</sup>Ninewells Hospital and Medical School, UK; <sup>3</sup>University of Glasgow, UK; <sup>4</sup>Bart's and The London School of Medicine and Dentistry, UK

**Aim:** To ascertain changes in practice in the treatment of Grave's thyrotoxicosis in Tayside, Scotland, over the past four decades.

**Methods:** The "Scottish automated follow-up register" (SAFUR) was queried to identify all patients treated for Grave's thyrotoxicosis from 1968 to 2007 inclusive. Demographic profile, treatment modalities, radio-active iodine (RAI) dose, and recurrence rates were studied and outcomes compared by X<sup>2</sup> test, and ANOVA using SPSS v15.0. A p value of <0.05 was considered significant.

**Results:** 3737 patients were diagnosed with Grave's thyrotoxicosis and were grouped as follows [Group-A (1968–1977; n = 436); Group-B