

**LIVER TRANSPLANTATION WITH DONOR AGED 70 OR ABOVE: IS IT JUSTIFIED?**

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**INTRODUCTION:** Individuals greater than 70 years old represent an increasing portion of yearly deceased donor organ pool in orthotopic liver transplantation (OLT). Donor age has been suggested as an independent risk factor for early graft dysfunction. Using elderly donor grafts, particularly those older than 70 years old remain controversial. **METHODS:** We analyzed perioperative data and outcomes of primary OLT with donor age greater than 70 and compared with those matched control OLT (ratio: 1 to 2, based on recipients age, donor/recipient BMI, etiology of liver disease and lab MELD score) who received liver grafts from donor age less than 50 years in the same time frame in our center. After excluding age as factor the donor risk index resulting in similar risk of graft failure is 1.3 (1.17-1.37) for the old-donor group and 1.22 (1.0-1.39) for control group. Results are shown as median and range. **RESULTS:** 13 patients with donor age greater than 70 could be included. Median follow-up was 19 months (6-99). The median donor age is 73 (70-87) years in the old-donor group and 37.5 (14-50) years old in control group. There is no difference in perioperative data of two groups. Interestingly, there is no statistical difference in terms of biochemistry at posttransplant week one, month 6 and month 12. The old-donor group revealed no higher incidence of acute rejection rate (15.4 vs. 19.2%), biliary complications (7.7 vs. 7.7%), vascular complications (7.7 vs. 3.8%) or HCV re-infection (50 vs. 75%). In addition, there is no significant difference in graft survival (30 d: 84.5 vs 92.3%, 12 mo 75 vs. 86.9%). PNF occurred in two patients in the old-donor and one in the control group, whereas DGF was observed present in 2 patients of the young donor group. **CONCLUSION:** Our data suggest that OLT with donor aged 70 or above could be safely done in properly selected recipients.

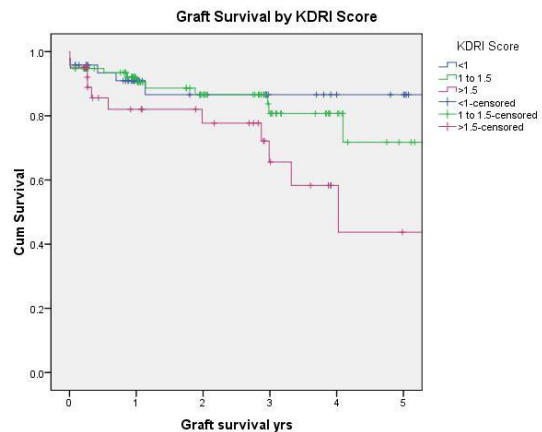
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**VALIDATION OF THE KIDNEY DONOR RISK INDEX (KDRI) SCORE IN A UK SINGLE CENTRE DCD COHORT**

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**Introduction.** Donation after cardiac death (DCD) increase the number of available grafts by expanding the donor pool beyond the conventional brainstem death donors (DBDs). The use of these marginal grafts would be enhanced by being able to estimate graft outcome based on patient factors. The Kidney Donor Risk Index (KDRI) is one method proposed to allow accurate assessment of the relative risk of graft failure based on donor and transplant variables, independent of the recipient.<sup>1</sup> We attempt to validate this score in a cohort of DCD grafts transplanted at St James's University Hospital, Leeds, in order to determine its usefulness when assessing these marginal grafts. **Method.** Data required to produce a KDRI score was obtained from an existing database. The variables required were: donor age, donor ethnicity, donor hypertension, donor diabetes, donor serum creatinine, donor cause of death, donor height and weight, DCD, donor hepatitis C status, number of B mismatches, number of DR mismatches, cold ischemic time and whether the procedure was an en-bloc or double renal transplant. This data was then used to produce a KDRI score as described in Rao et al (2009)<sup>1</sup>. **Results.** Between April 2002 and December 2009, 201 transplants utilising DCD grafts were performed at St James's University Hospital, Leeds. Of these a complete set of variables allowing KDRI calculation was available in 184. The cohort was then divided into those with a KDRI of <1 (n=48), those with a KDRI of 1-1.5 (n=95), and those with a KDRI of >1.5 (n=41). Survival analysis revealed that both patient and graft survival was significantly reduced in the KDRI >1.5 group (p=0.04 & p=0.038) with estimated 5-year graft survival approaching 50%. A Kaplan-Meier curve for graft survival demonstrates the stratification of risk provided by the KDRI score (figure 1). **Discussion.** The use of DCD grafts in renal transplantation is an accepted method of expanding the donor pool. This study validates the use of the KDRI score in this cohort of patients. Graft survival for patients in the high DRI group is significantly different at 1 yr and continues to deteriorate thereafter. The KDRI is potentially a useful tool when assessing marginal DCD grafts. **Figure 1.** 1. Rao et al. A Comprehensive Risk Quantification Score for Deceased Donor Kidneys: The Kidney Donor Risk Index. Transplantation, 2009; 88(2):231-236.



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