As of 12/01/2007, 36 kidney Ts took place at our center since the rule change and were compared to the 36 sequential Ts preceding the rule change. There were no statistically significant differences in recipients mean age (12 vs. 14 years), gender (61 vs. 64% male), or ethnicity (67 vs. 75% Caucasian) before vs. after the rule change. Moreover, the percentage of pre-emptive Ts and re-Ts were identical in both groups (27.8 and 16.7%, respectively), and the percentage of patients with high (≥10%) peak panel-reactive antibodies was not significantly different (19.5% before vs. 27.8% after). There was a significant difference in mean donor age (32.4 years before vs. 22.8 years after, p = 0.002). Patient survival (100% in both groups) and 1-year graft survival were comparable (100% before vs. 90% after, p = 0.06). Significant increases were found in the percentage of deceased donor (DD) Ts and HLA mismatches (MMs) after the rule change (14% DDs before vs. 57% DDs after, p = 0.002; 2.8 MMs before vs. 3.6 MMs after, p = 0.03). We next compared the mean wait time for DD kidneys in the 20 DD Ts since the rule change with the wait time of the most recent 20 DD kidney recipients before the rule change and found that recipients under the age of 18 years had a significantly longer wait time before the rule change (315 vs. 119 days, p = 0.04). Mean donor age in these 2 DD T cohorts was not significantly different (15.3 years before vs. 18.4 years after).

We conclude that at our center, the current allocation rules are associated with a substantial decrease in wait time for DD Ts and an increase in their relative number. Overall HLA matching decreased, but there was no statistically significant worsening in short-term patient or graft survival. These data suggest that overall access to kidney transplantation has improved for children. However, the accompanying decreases in LD Ts and HLA matching may affect long-term outcomes and possibly the overall donor pool unfavorably. Larger studies are needed to evaluate these possibilities.

Abstract# 1594 Poster Board #-Session: P150-IV

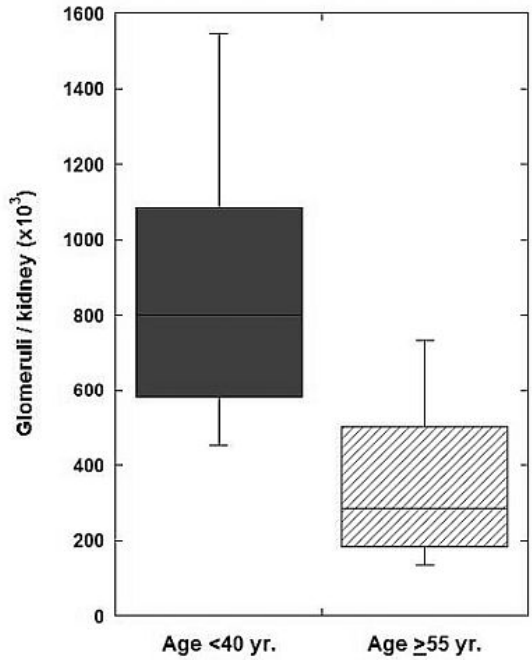
Kidney, Kidney-Pancreas and Liver-Kidney Transplantation in HIV Infected Individuals: The Italian Experience. Paolo A. Grossi,[1] Donato Donati,[2] Daniela Dalla Gasperina,[1] Matteo Tozzi,[3] Silvio Sandrini,[4] Ugo Boggi,[5] Patrizio Castelli,[3] Stefano M. Giulini,[6] Giorgio Gerunda,[7] Fabrizio Bresadola,[8] Renzo Dionigi,[3] Sante Venettoni,[9] Alessandro Nanni Costa.[9] *[1]Infectious Diseases, University of Insubria, Varese, Italy; [2]Transplantation Nephrology, Ospedale di Circolo, Varese, Italy; [3]Surgery, University of Insubria, Varese, Italy; [4]Nephrology, Ospedali Civili di Brescia, Brescia, Italy; [5]Surgery, University of Pisa, Pisa, Italy; [6]Vascular Surgery, University of Brescia, Brescia, Italy; [7]Surgery, University of Modena, Modena, Italy; [8]Surgery, University of Udine, Udine, Italy; [9]National Centre of Transplantation, Istituto Superiore di Sanita', Rome, Italy.*

Until a few years ago, HIV infection was considered an exclusion criteria for organ transplantation. However, more recently, because of the significant increase in life expectancy of HIV-infected persons with highly active antiretroviral therapy (HAART), kidney, kidney-pancreas, heart, lung and liver transplantation have been introduced in this patients population in several centers around the world. To evaluate the possible extension of the indications of kidney transplantation to HIV-infected individuals, the *Italian National Centre for Transplantation* has designed a protocol to be applied on a national basis. Inclusion criteria required a CD4 count ≥200/mm^3 and undetectable HIV viral load for at least 3 months for patients on HAART.The program was voluntarily adopted by 4 transplant centres. From January 2006 through November 2007 a total of 13 HIV infected patients (9 male and 4 female, mean age 46.4 years, range 35-56) underwent cadaveric kidney transplantation (including two kidney-pancreas and two liver-kidney) after a median waiting time of 142 days (range 58-650). Median CD4 cells count at the time of transplantation was 449 (range 210-782) and the HIV-RNA was undetectable in all recipients. HAART was started in all recipients after transplantation and HIV-RNA remain undetectable in all patients. Five patients (38.4%) experienced an episode of biopsy proven acute rejection (steroid resistant in one). Drug-drug interactions between antiretrovirals and immunosuppressive agents required frequent dosage modifications. Graft and patient survival was 100% at a median follow-up of 161 days after transplantation (range 8-669). Despite the limited number of patients and the shortness of the follow-up, our study confirms excellent short term results of kidney transplantation in HIV-infected individuals.

Abstract# 1595 Poster Board #-Session: P151-IV

Glomerular Function and Number in ECD Transplants. Biruh Workeneh,[1] Stephan Busque,[2] Gery Derby,[1] Kristina Blouch,[1] Bryan Myers,[1] Jane Tan.[1] *[1]Nephrology, Stanford University, Stanford, CA; [2]Surgery and Transplantation.*

Expanded criteria allografts exhibit a striking reduction in 5-year graft survival. We evaluated glomerular function and number in 43 subjects, who were studied perioperatively. ECD allograft recipients >55 yrs of age (59 ±5 yr, n=20) were examined and youthful deceased donors aged 18-40 yrs served as controls (24 ±6 yr, n=23). All recipients had a wedge biopsy at transplantation. Glomeruli were subjected to a morphometric analysis and computation of a single nephron ultrafiltration coefficient (SNKf). All but 6 patients had evaluation of GFR and its determinants 1-5 months post-Tx after SCr had reached a stable, nadir level (1.2 ±0.3 in aging vs 1.0 ±0.3 in youthful, p=0.03). GFR, renal plasma flow and oncotic pressure were determined by standard methods. The allograft ultrafiltration coefficient (Kf) was calculated by the model of Deen et. al. GFR at follow-up was lower in the aging than the youthful group by 30% (48 ±21 vs 69 ±17 ml/min, p=0.001). Neither MAP nor plasma oncotic pressure differed between the groups. The computed value for Kf in recipients of ECD was depressed 44% below youthful donors (3.7 ±2.2 vs 6.6 ±3.4 ml/min·mmHg; p<0.001). Thus, the extent of GFR depression seen in the aging donor group can entirely be accounted for by a decrease in Kf alone. Light and morphometric analysis revealed the %glomerulosclerosis to be higher in the aging (17 ±11% vs 2 ±2%, p=0.002), which fails to account for the difference in allograft Kf or GFR. Enlarged glomerular volume and surface area resulted in a higher SNKf in the aging group (11.1 ±3.5 vs 8.6 ±2.6 nl/min·mmHg, p=0.07) and is consistent with glomerulopenia, but fails to account for the low Kf. Dividing Kf by SNKf provides an estimate of the number of functioning glomeruli, which was profoundly depressed in the aging compared to the youthful group (355 ±211 vs 847±344 x 10^6, p<0.05; fig 1).



We conclude that accelerated renal senescence in ECD results in glomerulopenia. Those subjects in the bottom quartile receiving a single allograft would have less than 15% of the normal complement of glomeruli and could lead to the remnant kidney phenomenon with progressive allograft failure.

Abstract# 1596 Poster Board #-Session: P152-IV

Geriatric Recipients of Deceased Donor Renal Transplants Demonstrate Equal Graft Survival to Non-Geriatric Populations. Alp Sener,[1] Eugene J. Schweitzer,[1] Matthew Cooper,[1] Luis Campos,[1] Stephen T. Bartlett,[1] Benjamin Philosophe,[1] Rolf N. Barth.[1] *[1]Surgery, Division of Transplantation, University of Maryland School of Medicine, Baltimore, MD.*

Renal transplantation has become increasingly prevalent in the geriatric population accounting for 13.2% renal transplants performed nationally. We reviewed 3297 renal transplant recipients from our transplant database over the last 15 years to evaluate outcomes in the geriatric population. We used Kaplan-Meier survival estimates and logrank estimates of statistical significance. Our center has performed 468 living (LDRTx) and deceased donor renal transplants (DDRTx) in patients over the age of 65 years old since 1991. We have performed 14.2% of all renal transplants in patients over the age of 65 years old, 5.7% of transplants in patients over 70 years old, and 1.8% (60 transplants) in patients over 75 years old. Geriatric recipients (over 65 years old) of DDRTx demonstrated 83.0%, 74.1%, and 64.1% graft survivals at 1, 3, and 5 years. Geriatric DDRTx recipients had overall equal graft survivals to adult DDRTx (p=0.49). Geriatric recipients of LDRTx demonstrated 1 year graft survival of 94.3%, 3 year graft survival of 88.8%, and 5 year graft survival of 72.3%. These results were better than geriatric DDRTx recipients (p=0.04), but not as good as graft survival in adult (18-64 years old) LDRTx recipients (p=0.006). This was predominantly driven by poorer graft survival in LDRTx recipients older than 75 years (p=0.004). Graft survival in geriatric LDRTx recipients 65-69 years old (p=0.04) and 70-74 years old (p=0.4) had more equivalent outcomes to adult LDRTx recipients. These data support the good outcomes of both LDRTx and DDRTx in the geriatric population. DDRTx geriatric recipients had similar graft survivals to adult DDRTx recipients. LDRTx geriatric recipients had better outcomes than geriatric DDRTx recipients; although, not equal to the excellent results of younger LDRTx recipients.