



## Service Priorities and Programmes

### Electronic Presentations

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#### **Retrospective Audit of the Hong Kong Shared Kidney Program**

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#### **Introduction**

The Shared Kidney Program (SKP) was started on 14/12/2010 in three of the four renal transplant units (QEH, PMH and QMH) in Hong Kong.

#### **Objectives**

To review the impact of SKP on the cold ischemia time (CIT), short- and long-term outcomes of deceased-donor renal allografts.

#### **Methodology**

Perioperative data and graft outcomes of deceased-donor renal transplantation performed in the three units participating in SKP from 14/12/2010 to 11/4/2014 were compared with transplants performed before SKP during the period 1/1/2005 to 14/12/2010.

#### **Result**

307 and 185 renal allografts were transplanted in the pre- and post-SKP eras respectively. Comparing the paired sequential grafts (n=242) in the pre-SKP era to the shared grafts (n=122) in the post-SKP era, the latter showed shorter CIT (p<0.001), lower incidence of delayed graft function (DGF)(p=0.011), and lower serum creatinine level at the time of discharge (p=0.001). Graft survival at 1-year was similar between the two groups. Logistic regression analysis showed that donor age (OR=1.028, p=0.015) and CIT (OR=1.001, p=0.002) were independent predictors for post-transplant DGF. Subgroup analysis revealed that SKP resulted in a trend of reduction in both CIT and DGF in all three centers, reaching statistical significance for DGF in one (QMH) and CIT in two (PMH and QMH) participating centers.

Conclusions: SKP is an effective model to shorten CIT of the second deceased-donor kidney allograft for a multi-organ transplant center, which benefits the most from the SKP in terms of reduced CIT and lowered incidence of DGF in the second kidney allograft. While SKP results in non-inferior CIT and graft outcomes in

other participating units, longer term studies are warranted to evaluate the benefits of the program in these centers.