AB098. 3. Warm ischaemia time at vascular anastomosis in kidney transplantation and functional outcomes

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Background: Kidney transplant is the treatment of choice for patients with end stage kidney disease (ESKD). Cold ischaemia time (CIT), among other factors, is recognised risk factor for delayed graft function (DGF) in transplanted kidneys, however until recently less was known about the effect of warm ischaemia time 2 (WIT2) on both short- and long-term transplant graft function. Our aim in this study was to assess the variation in WIT2 in the Irish national kidney transplant service (NKTS) and the consequent rate of DGF resulting from this.

Methods: A retrospective review of data from Jan 2015 to Sept 2017. The outcome measures included incidence of DGF, length of hospital stay, serum creatinine levels at 1 and 3 months post transplantation.

Results: A total of 461 kidney transplants were performed during the study period. Eighty-four patients developed DGF (18.2%). The median WIT2 was 43 minutes [interquartile range (IQR), 34–53 minutes]. Longer WIT2 was associated with risk of DGF (z=3.25, P=0.0012) and it remained significant predictor in the binary logistic regression analysis (OR 1.025 per minute, 95% CI, 1.007–1.043, P=0.004). However, WIT2 didn’t impact on LOS or creatinine levels at 1 and 3 months post transplantation respectively.

Conclusions: WIT2 during vascular anastomosis is an important modifiable factor that impacts on the short-term functional outcome of kidney transplant. However more research is required to assess its impact on long-term outcome.

Keywords: Delayed graft function (DGF); kidney transplantation; warm ischaemia time

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