

## **IMPROVEMENT IN CARDIO-METABOLIC PARAMETERS FOLLOWING SUCCESSFUL SIMULTANEOUS PANCREAS KIDNEY TRANSPLANT (SPK) IN TYPE 1 DIABETES MELLITUS**

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**INTRODUCTION:** Simultaneous pancreas kidney transplant (SPK) is the treatment of choice in patients with type 1 diabetes and stage 4 and 5 chronic kidney disease (CKD). The long term haemodynamic and biochemical outcomes following successful SPK in a UK population are not well defined.

**AIM:** To evaluate metabolic and biochemical variables in patients with type 1 diabetes following SPK attending regular follow up in a tertiary renal centre.

**METHODS:** A retrospective analyses of successful SPK transplant patients over the last 12 years. Successful SPK was defined as insulin and dialysis independence at most recent clinic visit. Clinical and biochemical measures were obtained from patient records prior to SPK (V1) and at the most recent clinic visit (V2).

**RESULTS:** 47 patients (32 M, 15F) were included with a median (range) follow up of 4.2 (1.2-11) yrs. The mean±SD age at the time of SPK was 41±7 yrs and the duration of diabetes was 26.5±8.5 yrs. V1 to V2, systolic blood pressure fell from 139±18 to 127±16mmHg and diastolic from 78±12 to 72±10mmHg, HbA1c (n=22) decreased from 8.3±1.6 % to 5.6±0.6% and serum creatinine fell from 695±285 to 113±25µmol/l (p<0.01 for all variables). There was a reduction in the number of anti-hypertensive and lipid lowering agents at V2 (p<0.05).

**CONCLUSION:** SPK not only removes need for insulin and dialysis but also improves blood pressure and other markers of vascular risk in T1DM. Our data support the vital role of SPK in the management of type 1 diabetes patients with severe renal impairment in the UK.