

Improving the transition from paediatric to adult nephrology services: the impact of introducing a specialist young adult clinic

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Introduction

The transition from paediatric to adult nephrology services has long been identified as a high-risk time for young adult kidney transplant recipients(1). Graft loss is highest in this age group, irrespective of the age at which the graft was received(2). Non-adherence to medication is reported in up to 44% of graft losses and 23% of rejection episodes(3). The ISN and IPNA recommend that young adults are cared for by lead clinicians, supported by allied health professionals. In our Young Adult Clinic (YAC), established in 2011, patients were reviewed by a consultant nephrologist with a specialist interest in transitioning young adults, a specialist nurse, a youth worker and a clinical psychologist. Here we review the outcomes of young adults who attended the YAC as compared to those who received standard care in adult nephrology clinics at our institution.

Methods

We performed a retrospective analysis of outcomes in young adult renal transplant recipients from 2003 to 2019 (8 years prior and 8 years post establishment the YAC in 2011). Included were patients aged 25 and over at the time of analysis, who had been diagnosed with renal disease as children (under 18 years) and who had received their first renal transplant under the age of 24 years. Outcomes compared were rejection episodes and graft losses that occurred between 18-25 years in YAC and non-YAC patients. Non-adherence with immunosuppressive medications and/or clinic visits was recorded, in addition to primary disease, recurrent disease and immunosuppressive regimen.

Results

Of the 32 patients identified, 9 were reviewed in the YAC. The median age at which patients received their first renal transplant was 15.5 (range 7-23) years and 17 (range 2-23) years in YAC and non-YAC patients, respectively. In the YAC group there were no episodes of rejection, nor was there any documented non-adherence between 18-25 years. 22%(2/9) of YAC patients lost their grafts in young adulthood. In non-YAC patients, 43%(10/23) had one or more rejection episode and 30%(7/23) of patients lost their grafts. Non-adherence was documented in 30%(3/10) of non-YAC patients with rejection episodes; all three of which went on to lose their graft during early adulthood. Of all the non-YAC patients that lost their graft, compliance concerns were noted in 71%(5/7).

Discussion

This preliminary review of outcomes in young adult renal transplant recipients suggests that attending specialist YACs at our institution may be associated with improved adherence to medications, engagement in clinical review and in turn, lower rates of rejection and graft loss. Whilst we recognise the limitations of small sample size, our data supports previous reports of improved outcomes in those attending specialist transition services (4). MDT support of patients with complex physical and psycho-social health during adolescence is becoming increasingly recognised as an important contributor to their overall well-being in

adulthood. The adoption of an MDT approach could potentially improve outcomes across all specialities in which children with chronic illnesses transition into adult services. We plan to extend our review to include other UK specialist renal transition services.