**Introduction and Aims:** Renal biopsy is the gold standard for identifying the cause of delayed graft function (DGF) in renal transplants. Routine practice in our unit is to perform a biopsy at day 7-10 in the presence of DGF in order to rule out acute rejection. There are small but not insignificant risks associated with this procedure and these risks are highest in the early post-transplant period. DGF is more common in kidneys donated after cardiac death (DCD) and in these cases is most likely to be related to acute tubular necrosis (ATN). We hypothesised that patients who receive a DCD kidney with lymphocyte depletion at induction are unlikely to have rejection as a cause of DGF, and therefore the risks of biopsy may outweigh the potential benefits in these patients.

**Methods:** We retrospectively analysed the results of all kidney transplant biopsies performed within 14 days of transplantation, in recipients who received a DCD kidney with anti-thymocyte globulin (ATG) induction. Cases were identified and data extracted from a pre-existing renal database. Discharge summaries, clinic letters and histology reports were reviewed in order to identify rejection episodes, biopsy complications and any changes in management based on biopsy findings. Biopsies were performed under US guidance using a biopsy gun with 16G or 18G biopsy needle, either by a consultant nephrologist or by a nephrology trainee under consultant supervision.

**Results:** 44 patients received a DCD renal transplant between January 2011 and December 2014. 37 patients received ATG induction and therefore were eligible for this study. These 37 patients had 39 biopsies performed within 14 days of transplantation; 37 of these were initial biopsies, 2 patients had repeat biopsies. 35 of the initial biopsies showed ATN only. 1 showed ATN and TMA leading to a change in the maintenance immunosuppressive therapy and 1 showed recurrence of the native renal disease. Both the repeat biopsies showed ATN only. There were no episodes of biopsy proven rejection in the first 14 days in ATG-induced DCD renal transplant recipients. The complication rate for acute inpatient transplant kidney biopsies in our unit is 6%, in contrast to a complication rate of 1.4% in our outpatient transplant biopsies (major complications 0.2%). This illustrates the previously documented increased risk associated with biopsies performed in the early post-transplant period.

**Conclusions:** Our data show that there were no episodes of rejection in ATG-induced DCD renal transplant recipients in the first 2 weeks. Our unit data also demonstrates a higher complication in this cohort than in our programme overall. This supports the hypothesis that the risks of routine biopsy in these circumstances outweigh the diagnostic benefit. We would therefore suggest delaying renal biopsy in these patients unless there is a specific clinical indication, over and above DGF alone.