OUTCOMES OF EARLY VERSUS LATE REJECTION IN KIDNEY TRANSPLANT RECIPIENTS

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BACKGROUND

• Several studies have suggested that late rejection (LR) has a greater effect on long-term graft survival than early rejection (ER).
• The aim of this study was to investigate the relative impact of ER and LR on graft function after kidney transplantation.

METHODS

• Retrospective analysis of patients who underwent kidney transplantation at our centre between 2006 and 2017 (excluding ABO incompatible transplants).
• ER and LR were defined as biopsy-proven rejection within the first 3 months and 3 months after transplantation respectively.
• We compared the following outcomes:
  • Overall patient survival,
  • Death censored graft survival (return to dialysis or re-transplantation),
  • Change in eGFR at 1 and 3 years post episode of ER/LR

RESULTS

• No significant difference in unadjusted patient survival (figure 1).
• Trend towards lower graft survival after LR at 10 years (figure 2).
• Recipients with ER sustained a lower fall in eGFR from baseline (Δ -6.4ml/min/m² vs -16.2 ml/min/1.73m² at 1yr) after 1 year (figure 3).
• At 3 years from diagnosis, recipients with LR had 26.9% reduction in baseline eGFR vs.10.2% in the ER group (figure 4).

CONCLUSION

• LR (>3 months) is associated with a significantly greater decline in eGFR one year after an episode of rejection compared with ER at 1 and 3 years.
• Given the worse outcomes following LR, a greater emphasis needs to be made on efforts to predict and prevent recipients at risk of late rejection in order to avoid subsequent graft failure.