

## **Diagnostic predictors of complications and survival after renal transplantation in cats.**

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**OBJECTIVE:** To identify preoperative diagnostic results that predict postoperative complications and survival in feline renal-transplant recipients. **STUDY DESIGN:** Retrospective clinical study. **ANIMALS:** Sixty-one feline renal allograft recipients. **METHODS:** Medical records for 61 consecutive cats that underwent renal allograft transplantation between January 1, 1996, and December 1, 1999, were reviewed. Age, diagnosis, body weight, body condition score, preoperative medical treatment, systolic blood pressure, packed cell volume, biochemical parameters at admission and at the time of surgery, postoperative complications, and postoperative survival were recorded. Associations of preoperative data with the occurrence of postoperative complications were determined using logistic regression. Postoperative survival was graphed using a Kaplan-Meier cumulative-survival plot. Associations of covariates with postoperative survival were analyzed using Cox proportional hazards analysis. **RESULTS:** Two parameters were significantly associated with occurrence of postoperative central nervous system (CNS) disorders: blood urea nitrogen concentration (odds ratio = 1.083; 95% CI = 1.018 to 1.148) and serum creatinine concentration (odds ratio = 1.8; 95% CI = 1.413 to 2.187) at the time of surgery. Postoperative survival 6 months after transplantation was 59%, though 3-year survival remained at 42%. Of all covariates investigated, only recipient age (relative hazard = 1.183; 95% CI = 1.039 to 1.334) was significantly associated with survival. **CONCLUSION AND CLINICAL RELEVANCE:** Standard measures of preoperative renal dysfunction do not predict postoperative survival in cats after renal transplantation, although an increase in the degree of preoperative azotemia is associated with an increased risk of CNS disorders after surgery. Increased recipient age is associated with decreased survival after renal transplantation. Copyright 2001 by The American College of Veterinary Surgeons