

STATINS NOT ASSOCIATED WITH IMPROVED PATIENT OR GRAFT SURVIVAL IN KIDNEY TRANSPLANT (KTX) RECIPIENTS RECEIVING TACROLIMUS

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The beneficial effects of early statin use in kidney transplant (Ktx) recipients, especially those on tacrolimus, is not well established. We evaluated the predictors of statin use in such a population and examined its association with subsequent patient and kidney allograft survival.

We examined 715 consecutive patients who underwent Ktx between January 1998 and January 2002. Statin use was assessed at baseline and 3, 6, 9, and 12 months post transplant. Patients were followed prospectively for allograft and patient survival.

Twenty three percent of our Ktx recipients were exposed to statins. Greater than ninety percent of our patients received tacrolimus based immunosuppression. Older age and higher triglyceride levels were associated with higher rate of statin use. Severe liver disease, CMV IgG seropositivity, higher creatinine at 3 months, and use of an antibody induction and tacrolimus monotherapy protocol were associated with lower rate of statin use. There was no association between statin use and a diagnosis of cardiovascular disease. Patients in the statin group received statins within the first year after the transplant. Graft and patient survival were examined beginning one year after kidney transplantation and up till a mean follow up period of 6.6 years. There was no difference in patient survival [HR 0.99; 95%CI 0.72-1.37] or graft survival [HR 0.97; 95% CI 0.76-1.24]. After adjustment for multiple variables including age, history of myocardial infarction, sex, baseline creatinine and tolerance protocol, statins were not associated with improved patient or graft survival.

Statin use was not associated with a history of cardiovascular disease suggesting the need for more evidence of efficacy of statins in this population. In a Ktx population primarily receiving tacrolimus based immunosuppression, early statin use was not associated with improved patient or graft survival.