

Quality of life and side effect profile of liver versus kidney recipients the first two years posttransplant: Findings from the Patient Outcomes Registry for Transplant Effects on Life (PORTEL)

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Purpose: We previously reported the impact of immunosuppressive regimen on quality of life (QOL) in a cohort of recent kidney transplant patients. In this study, we compare longitudinal data on treatment related side effects and QOL in the two years following kidney and liver transplantation.

Methods: Solid organ recipients 16 years of age or older were eligible to participate in PORTEL regardless of immunosuppressive regimen or time since transplant. Registrants completed a 100-item survey capturing a number of posttransplant outcomes. Side effects were measured by the Memphis Survey. QOL was measured by the SF-12, which provided Mental Component Summary (MCS) and Physical Component Summary (PCS) scores.

Results: Data were analyzed from all 58 kidney and 43 liver patients in the registry who were within 12 months of transplant at their first survey (baseline), and returned follow-up data 6 and 12 months after the first survey. The majority of recipients were on tacrolimus-based immunosuppression (kidney=62.7%, liver=88.3%). Reported prevalence of diabetes, high cholesterol and osteoporosis at baseline was similar across organ types while more kidney patients reported high blood pressure (80.7% vs. 44.2%, $p<0.001$). Liver patients reported more infections at baseline compared to kidney patients (55% vs. 25%, $p<0.05$), while rates of rejection and hospitalizations were similar. Racial distribution and socioeconomic factors were similar for both organ types. Compared to patients on cyclosporine, kidney patients on tacrolimus reported better MCS scores (56.1 vs. 49.1, $p<0.01$) and less distress from cosmetic and lifestyle side effects (11.6 vs. 16.1, $p<0.05$) at baseline while liver patients' scores did not vary by treatment regimen. At 6 months and 12 months follow-up, kidney and liver patients reported improvement in PCS ($p<0.05$) and an improving trend in life/role function. However, emotional symptoms in kidney patients worsened ($p<0.05$). During the follow-up period, after controlling for regimen and age, liver patients reported consistently worse side effects compared to kidney patients in the emotional ($p<0.05$), life/role ($p<0.05$) and mobility ($p<0.01$) domains.

Conclusion:

While kidney and liver recipients similarly recover physical QOL after transplantation, liver recipients report a more problematic course of emotional, life/role and mobility side effects.