

LONGITUDINAL ANALYSIS OF QUALITY OF LIFE IN KIDNEY AND LIVER PATIENTS IN THE PATIENT OUTCOMES REGISTRY FOR TRANSPLANT EFFECTS ON LIFE (PORTEL)

Purpose: After solid organ transplantation, factors such as immunosuppressive regimen, organ type, and time since transplant may influence a patient's quality of life (QOL). In this study, we evaluated longitudinal QOL data 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. The Memphis Survey measured side effects. The SF-12 measured QOL and provided Mental Component Summary (MCS) and Physical Component Summary (PCS) scores.

Results: We analyzed data from 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 surveys at 6 and 12 months after the first survey. The majority were on a tacrolimus-based therapy (62.7% of kidney and 88.3% of liver patients). Racial distribution and socioeconomic factors were similar for both organ types. Reported prevalence of diabetes, high cholesterol, and osteoporosis at baseline was similar across organ types while more kidney transplant recipients reported high blood pressure (80.7% vs. 44.2%, $p < 0.001$). Rates of rejection and hospitalizations were similar for the organ groups while liver transplant recipients reported more infections at baseline (55% vs. 25%, $p < 0.05$). Compared to the general population: at baseline, kidney patients reported better MCS scores ($p < 0.05$), and both kidney and liver patients reported worse PCS scores ($p < 0.05$). Compared to patients on cyclosporine: kidney patients on tacrolimus reported better MCS scores ($p < 0.01$), less distress from high blood pressure ($p < 0.05$), fewer sexual performance difficulties ($p < 0.05$) and less hair growth ($p < 0.05$). Liver patients' scores did not vary by treatment regimen. During the follow-up, PCS improved in both patient groups ($p < 0.05$) and, after controlling for regimen and age, liver patients reported consistently worse emotional ($p < 0.05$), life/role ($p < 0.05$), and mobility ($p < 0.01$) side effects compared to kidney patients.

Conclusion: While kidney and liver recipients similarly recovered physical QOL after transplantation, liver recipients reported a more problematic course in terms of emotional, life/role, and mobility side effects.