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Simultaneous Liver and Kidney Transplant
in a Middle-Income Country: A Single-Center Experience

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Background: Simultaneous liver-kidney transplantation (SLKT) is a complex procedure essential for patients with end-stage liver and kidney disease. Most SLKT outcome reports originate from large transplant centers in developed countries, with limited data from Latin America. This study aimed to describe SLKT outcomes at a high-complexity center in Colombia to assess their comparability with existing literature.

Material/Methods: A retrospective, single-center study included adult and pediatric patients who underwent SLKT between January 2005 and December 2023. Data on demographics, perioperative status, in-hospital course, and follow-up outcomes were collected from hospital databases and medical records. Kaplan-Meier survival analysis and descriptive statistics were utilized.





Results: During the study, 41 SLKTs were performed – 31 in adults and 10 in children – accounting for 4.18% of liver transplants and 5.73% of kidney transplants. Alcoholic cirrhosis was the primary indication for adult liver transplants (38.7%), while congenital hepatic fibrosis was prevalent in children (50%). Diabetic nephropathy was the leading cause of adult kidney disease (48.3%), with nephronophthisis and polycystic kidney disease common in pediatric cases (30% each). All adult grafts were from deceased donors; 50% of pediatric cases used living donors. No intraoperative dialysis was required. Four early postoperative deaths occurred due to sepsis and multiple organ failure. Survival rates at 1, 3, and 5 years were 92.6%, 80.4%, and 75.6%, respectively.

Conclusions: SLKT outcomes at the institution are satisfactory and comparable to other series, though pediatric patients face a higher risk of early septic complications.

Keywords: Adult • Kidney Transplantation • Liver Transplantation • Pediatrics • Survival

Abbreviations: **SLKT** – simultaneous liver and kidney transplantation; **MELD** – model for end-stage liver disease; **PELD** – pediatric end-stage liver disease; **ICU** – Intensive Care Unit; **IQR** – interquartile range; **UTI** – urinary tract infection

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