

ABO INCOMPATIBLE DUAL GRAFT LIVING DONOR LIVER TRANSPLANTATION USING MODIFIED EXTENDED LEFT LATERAL GRAFT: CASE REPORT

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Background : Liver transplantation is a life-saving procedure for patients with end-stage liver disease, but the availability of suitable donor grafts remains a significant challenge. Innovative surgical techniques are essential to expand donor options while maintaining favorable outcomes for both donors and recipients.

Methods : A 54-year-old male with hepatitis B-related cirrhosis underwent an ABO-incompatible dual graft liver transplantation. The procedure involved a modified right lobe graft from one donor and a modified extended left lateral graft from another donor. To minimize donor morbidity, the middle hepatic vein (MHV) was excluded from the grafts, and MHV reconstruction in the recipient was performed using a donor-derived vein allograft to ensure optimal venous outflow. Post-operative management included plasma exchange and immunosuppressive therapy to prevent rejection.

Results : The dual graft transplantation achieved a GRWR of 1.27, ensuring sufficient graft volume for the recipient. Post-operative recovery was uneventful, with no significant complications. The recipient demonstrated normalized liver function within weeks, and both donors recovered fully without long-term sequelae.

Conclusions : This case demonstrates the effectiveness of a modified dual graft technique in addressing the challenges of limited graft availability while ensuring a sufficient graft-to-recipient weight ratio (GRWR). By prioritizing donor safety and optimizing recipient outcomes, this method offers a promising strategy for managing high-risk liver transplant cases. It also highlights the potential for expanding donor options and improving the applicability of dual graft techniques in complex clinical scenarios.

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