

**LV OP 2-1****Clinical features and prognosis of DIHBS (diffuse intrahepatic biliary stricture) after adult ABO-incompatible living donor liver transplantation**

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**Introduction :** Despite the advancement in desensitization protocol, diffuse intrahepatic biliary stricture (DIHBS), an attenuated form of antibody mediated rejection (AMR), remains an unresolved problem. As a high-volume LT center, we retrospectively review clinical outcome and prognosis of recipients who developed DIHBS after ABOi LDLT.

**Methods :** From November 2008 to December 2017, total of 497 cases of ABO incompatible LDLT were performed at Asan Medical Center. Among them, twenty-four patients (4.83%) developed DIHBS. Retrospective review of medical records of these patients was carried out.

**Results :** Median time of diagnosis for DIHBS after ABOi LDLT was 2.8 months. In patients with DIHBS, the 3-year patient survival rate was 69.9%. Causes of patient death in nine patients were recurrent HCC in four patients, biliary sepsis in two patients, graft failure (not associated with AMR) in one patient, post-operative bleeding after re-LT in one patient, and pneumonia in one patient. Nine patients (37.5%) received re-transplantation. Graft survival rates at 3-year was 40.6%. Both patient survival and graft survival rates were significantly lower than ABOi LDLT recipients without DIHBS (both  $p < 0.001$ ). Between ABOi LDLT patients with or without DIHBS, there were no significant differences in pre-operative isoagglutinin (IA) titer, post-operative peak bilirubin, AST, ALT, IA titer, and pre- and post-operative frequency of total plasma exchange (TPE).

**Conclusions :** In this study, DIHBS developed usually before 3 months after ABOi LDLT. DIHBS significantly affects short and long-term outcome in ABOi LDLT. In patients who demonstrated DIHBS, over half of the patient progress to graft failure and need re-LT.

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