Incidence of biliary strictures in Mongolian patients who have received liver transplantation abroad

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Background: Biliary stricture is the most common post living donor liver transplant (LDLT) surgical complication with 28%–32% of patients suffering from various degrees of strictures. Incidence of biliary stricture varies significantly between centers and decreases within centers as experience grows. In this study, we compare incidence of biliary stenosis among Mongolian patients under our follow-up that have underwent LDLT at various centers abroad.

Methods: We retrospectively analyzed the records of 185 patients who have received LDLT in three South Korean and six Indian centers. We chose centers with more than five Mongolian LDLT patients. Centers with less than five patients under our follow-up were discounted. Except two patients who had dual lobe transplant and two pediatric patients, all patients received right lobe liver transplant. Patients with computed tomography or magnetic resonance imaging diagnosed bile stricture were counted depending on which procedure they had (endoscopic retrograde cholangiopancreatography [ERCP] procedure or percutaneous transhepatic biliary drainage [PTBD]). The number patients undergoing ERCP and/or PTBD were divided by total number of patients to receive percentage of patients experiencing biliary strictures that require intervention.

Results: From center to center, biliary strictures that required intervention ranged from 2.77% to 37.5%. The average was 19.79% (standard error of the mean, ± 4.15). The numbers (%) of ERCP/PTBD by centers are as follows. Korea A (N=12): 1 (8.3%); Korea B (N=21): 1 (4.7%); Korea C (N=9): 3 (33.3%); India A (N=7): 2 (28.5%); India B (N=8): 3 (37.5%); India C (N=72): 2 (2.77%); India D (N=17): 3 (17.6%); India E (N=30): 7 (23.3%); India F (N=9): 2 (22.2%).

Conclusions: Biliary stricture is a common complication in LDLT. However, the rate of biliary stricture varies significantly among the surgeons since surgical technique and experience varies. This study helps advise LDLT candidates for suitable centers.

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