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Technical Aspects of Biliary Reconstruction Correlated with Biliary Complications in 46 Consecutive Right Lobe Liver Transplantations from Living Donors

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Abstract

Introduction: Biliary complications contribute to a high morbidity rate in patients with right lobe liver transplant from a living donor. We retrospectively evaluated biliary reconstructions and complications in a number of recipients with liver transplant from a living donor, in a single center.

Patients and Methods: A number of 46 patients (23 males and 23 females aged 9-63) received a right lobe liver graft between 2009 and 2013, with the following types of biliary reconstruction: duct-to-duct choledochocholedochal anastomosis (n=24) or Roux-en-Y hepaticojejunoanastomosis, with or without an external transanastomotic biliary stent.

Results: The rate of biliary complications (leakage 15.21%, anastomotic stenosis 4.34%, overall 17.39%) was not statistically significantly influenced by the demographics of the studied lot, by the etiology of the liver disease or by the characteristics of the biliary reconstruction; the only risk factor which showed a statistically significant influence in terms of biliary complications was MELD.

Conclusion: The type and technique of the biliary reconstruction in LDLT should be adapted depending on the anatomy of the biliary tree of both the donor and recipient, as well as the clinical and laboratory findings of the recipient.

Key words: right lobe living donor, liver transplant, biliary complications, Model for End Stage Liver Disease (MELD)

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