

EXPERIENCE WITH PURE LAPAROSCOPIC RIGHT DONOR HEPATECTOMY FOR UNFAVORABLE BILE DUCT VARIATIONS IN A SMALL-VOLUME CENTER

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Background : Pure laparoscopic right donor hepatectomy (PLRDH) has gained increasing acceptance in recent years. However, its technical demands and the emphasis on donor safety have largely restricted its practice to experienced surgeons in high-volume centers. Anatomical variations in donor bile ducts are frequently regarded as significant challenges for performing PLRDH. This study aims to share the experience of performing PLRDH for a donor with unfavorable bile duct variations in a small-volume center.

Methods : A 42-year-old male donated a liver graft to his wife, who had alcoholic liver cirrhosis. The donor had a type 2 bile duct variation, with the possibility of harvesting the right anterior duct and right posterior duct separately. Additionally, an accessory B6 bile duct was also present. Bile duct division was performed under ICG fluorescence guidance, and the bile duct stumps were closed with sutures.

Results : The operation time was 420 minutes, with no open conversion. The estimated blood loss was 600 mL, and no transfusion was required. The graft weighed 937 g, with a graft-to-recipient weight ratio (GRWR) of 1.37. Two bile ducts were harvested: one right bile duct and a distant additional B6 duct. The recipient's common hepatic duct was anastomosed to the Glisson capsule of the graft liver, and no biliary complications were observed during the 1-year postoperative follow-up. Both the donor and the recipient were discharged without complications on postoperative days 7 and 17, respectively.

Conclusions : This case highlights the feasibility and safety of performing PLRDH for donors with unfavorable bile duct variations in a small-volume center.

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