

輔助性活體肝臟移植是否有較高的手術併發症？

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Does salvage living donor liver transplantation carry higher surgical complications ?

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Introduction:

Salvage liver transplantation (LT) has been performed for recurred hepatocellular carcinoma (HCC) or for deterioration of liver function after resection of HCC. Controversies arise, however, over the technical feasibility of salvage live donor LT (LDLT) in patients who underwent liver surgery due to extensive adhesion, short pedicles of vascular and biliary anatomies. This study aimed to evaluate the surgical complications of salvage LDLT.

Materials and Methods:

From Jan, 2000 to Dec, 2014, 463 recipients with HCC undergoing living LDLT were enrolled in this study. 100 recipients were salvage LDLT were 363 were primary LDLT. The patients were divided by the time (June, 2011) into Era I (first 50) and Era II (later 50 patients). The surgical complications were analyzed.

Results:

The surgical-related mortality and biliary complication were summarized in Table I, II. The overall surgical-related mortality including primary and salvage LDLT was significantly higher in Era I than II (5% vs 1.5%, $p=0.041$). The surgical-related mortality of salvage LDLT was reduced from 8% in Era I to 2% in Era II despite not reaching statistical significance; importantly almost no significant difference, compared to primary LDLT in Era II (2% vs 1.4%, $p=0.913$). Nevertheless, salvage LDLT carried higher biliary complications, compared to primary LDLT (22% vs 11%, $P=0.015$) even in Era II. There were no significant differences between salvage and primary LDLT in terms of hepatic artery, portal vein and hepatic outflow complications.

Conclusion:

Salvage LDLT for HCC provided low and similar surgical mortality, and comparable long-term oncologic outcomes compared to primary LDLT. But was associated with higher biliary complications which requires further investigation and improvement.

Table I. Hospital Mortality

Hospital Mortality	Overall	Salvage (100)	Primary (363)	P value
Overall		5 (5%)	10 (2.8%)	0.205
Era 1	12 (4.5%)	4 (8%)	8 (3.7%)	0.245
Era 2	3 (1.5%)	1 (2%)	2 (1.4%)	0.913
P value	0.110	0.309	0.169	

Table II. Biliary Complication

Bile Duct	Overall	Salvage	Primary	P value
Overall		22 (22%)	42 (11%)	0.015
Era 1	31 (11.5%)	8 (16%)	23 (10.5%)	0.05
Era 2	33 (17.1%)	14 (28%)	19 (13.4%)	0.056
P value	0.299	0.348	0.069	