Salvage Living Donor Liver Transplantation For Recurrent Hepatocellular Carcinoma After Laparoscopic Hepatectomy

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Background: A salvage liver transplantation (LT) strategy that has been shown to be comparable to primary LT, the patient can avoid life-long immunosuppression. A previous liver resection may increase surgical difficulty by creating intra-abdominal adhesions. Laparoscopic hepatectomy (LH) may reduce such technical consequences, but its effect on subsequent LT has not been reported. We study the operative results of LT after laparoscopic or open hepatectomy (OH).

Methods: From January 2010 to December 2014, 43 salvage LT for recurrent HCC were performed, 9 following prior LH and 34 following prior OH.

Results: Median durations of the time from incision to total hepatectomy were 400 ± 73.8 and 485 ± 78.6 min in the LH and OH groups, respectively (p = 0.04). Mean packed RBC transfusions during LT were 2.4 ± 6.0 and 10.1 ± 5.7 U in the LH and OH groups, respectively (p = 0.03). Median post-operative length of stay was 19 ± 3.9 and 21 ± 14.7 days in the LH and OH groups, respectively (p > 0.05). In-hospital mortality was 2.9% (n=1) only in OH group.

Conclusions: In our study, salvage liver transplantation after laparoscopic hepatectomy for HCC is advantageous to open surgery in terms of operative time, blood loss and transfusion requirements.