

P044**Learning curve of laparoscopic living donor right hepatectomy:
review of a single surgeon's 103 laparoscopic cases**

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Introduction : To evaluate the feasibility of laparoscopic living donor right hepatectomy

Methods : Data of living donors who underwent right hepatectomy by a single surgeon at Samsung Medical Center were reviewed. Comparisons regarding the anatomy, operation, and recovery were performed between open and laparoscopy group. Surgical videos were reviewed for each procedure. Linear regression was used for analyzing operational procedures showed linear decrease in time.

Results : During the period, 96 and 103 donors underwent open and laparoscopic living donor right hepatectomy, respectively. Median estimated blood loss was smaller (300 vs. 200mL, $P<0.001$) and mean operation time (301.3 ± 63.3 vs. 252.2 ± 42.8 minutes, $P<0.001$) and median hospital stay was shorter in the laparoscopy group. (10 vs. 8 days, $P<0.001$). There was no difference in complication rate. (24.0% open vs. 14.6% laparoscopy, $P=0.092$) Although overall bile duct openings were more than expected in the laparoscopy group, ($P=0.022$) it showed improvement with the increase in case numbers. ($P=0.022$) Total operation time of laparoscopy showed linear decrease along with increase in laparoscopic cases. ($R^2=0.407$, $\beta=-0.914$, $P=0.001$) and it significantly decreased after nearly 50 cases (2nd to 3rd and 3rd to 4th, $P=0.001$ and $P=0.023$, respectively). Inflow control and ischemic line marking ($R^2=0.238$, $\beta=-4.4$), parenchymal transection time ($R^2=0.290$, $\beta=-22.4$) and graft placement in laparoscopic plastic bag ($R^2=0.204$, $\beta=-1.7$) showed the most significant decrease in time. ($P<0.001$ for each)

Conclusions : Although bile duct division is challenging in laparoscopic living donor right hepatectomy, it showed comparable feasibility to open surgery along with the learning curve.

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