

P026**Oncologic outcome of unplanned conversion during minimally invasive liver resection for hepatocellular carcinoma**

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Introduction : As treatment of hepatocellular carcinoma(HCC), minimally invasive liver resection(MILR) is increasing. When compared to planned surgery, unplanned conversion is also known to have a negative effect on perioperative outcomes and long-term oncologic outcomes. In study, we compared perioperative outcomes, pathologic findings, and long-term oncologic outcomes of planned surgery and unplanned conversion in MILR for HCC.

Methods : From January 2006 to December 2016, 307 patients underwent MILR for HCC. The medical records of the patients were retrospectively reviewed. We compared planned surgery group and unplanned conversion group regarding to perioperative outcomes, pathologic characteristics and long-term oncologic outcomes.

Results : Of the 307 patients underwent MILR, 21(6.8%) patients proceeded unplanned open conversion during surgery. Unplanned conversion group showed higher in estimated blood loss (216.7ml vs. 896.2ml, $p<0.001$), perioperative transfusion (3.1% vs. 33.3%, $p<0.001$), postoperative complication (19.2% vs. 52.4%, $p=0.002$), and length of hospital stay (7.6 days vs. 10.8 days, $P=0.001$) compared to planned surgery group. Pathologic tumor size was significantly larger in unplanned conversion group (2.6cm vs. 3.5cm, $p=0.002$). Tumor size was a significant factor for conversion in logistic regression analysis. There was no statistical difference between two groups in overall survival ($p=0.194$) and disease-free survival ($p=0.502$). In multivariate analysis, tumor size (HR 1.809, 95% CI 1.188-2.754, $p=0.006$) and tumor number were contributing factor (HR 2.605, 95% CI 0.908-7.474, $p=0.075$).

Conclusions : Unplanned open conversion during MILR for HCC was associated with poor perioperative outcome, but not with long-term oncologic outcome. When performing MILR for large HCC, it should be considered and prepared for unexpected open conversion.

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