

## RESULTS OF LAPAROSCOPIC VERSUS OPEN MAJOR HEPATECTOMY FOR THE MANAGEMENT OF HEPATOCELLULAR CARCINOMA IN A VIETNAMESE TERTIARY HOSPITAL: A FIVE-YEAR RETROSPECTIVE COMPARATIVE STUDY

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**Background** : Laparoscopic techniques are constantly evolving and gradually take the place of open surgery in majorities of abdominal procedures. Nevertheless, for liver resection, the ratio of open surgery is still relatively high, especially for major hepatectomy. This study aimed to compare the results between laparoscopic and open major hepatectomy for managing hepatocellular carcinoma (HCC) in a Vietnamese tertiary hospital over a five-year period.

**Methods** : A retrospective comparative study between two groups of patients with HCC who underwent major liver resection either by laparoscopic or open approach at Departments of Hepatopancreatobiliary Surgery, Military Central Hospital 108, from January 2019 to December 2023.

**Results** : A total of 260 major hepatectomies were consecutively performed to manage HCC. 166 resections were performed in the open approach group (63.8%), and 94 resections were performed in the laparoscopic surgery group (36.2%). The laparoscopic approach helps to minimize intraoperative blood loss ( $257.38 \pm 123.84$  mL vs.  $348.40 \pm 165.01$  mL,  $p = 0.002$ ) and shorten the length of hospital stay ( $8.08 \pm 2.35$  nights vs.  $10.98 \pm 5.66$  nights,  $p < 0.001$ ). For other short-term outcomes, the two groups had no differences in perioperative complications, morbidities, and mortality. Regarding long-term outcomes, the two groups had no differences in overall and disease-free survival.

**Conclusions** : The application of the laparoscopic approach in major hepatectomy to treat HCC is safe, feasible, and minimizes invasive, which helps faster postoperative with similar long-term outcomes. Laparoscopic major hepatectomy could be an alternative and become the gold standard in selected patients.

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