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ORIGINAL ARTICLE – HEPATOBILIARY TUMORS

Pure Laparoscopic Anatomical Segment V Resection Using the Extrafascial and Transfissural Glissonean Approach

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ABSTRACT

Background. The Glissonean approach is a widely used, effective technique for anatomical segmentectomy using an open or laparoscopic approach.[1–4] In the extrafascial Glissonean approach, the deep tertiary branches of the right anterior portal pedicle may be difficult to dissect from the liver hilum.[5,6] We present a pure laparoscopic anatomical segment V resection using the extrafascial and transfissural Glissonean approach.

Methods. A 49-year-old man presented with a single mass in segment 5 of the liver. (1) Dissection of the right anterior portal pedicle: the right anterior portal pedicle was dissected meticulously. After temporary clamping of the pedicle, the main and right portal fissure were delineated. (2) Opening of the main and right portal fissure: the main and right portal fissure were opened for approaching the deep tertiary segment V portal pedicle.[7,8] (3) Dissection of the segment V portal pedicle: the segment V portal pedicle was dissected and the segment V territory was confirmed. After dissection of the segment V hepatic vein, the remnant liver parenchyma was transected.

Results. The operation time was 280 min, the estimated blood loss was 80 mL, and the total Pringle maneuver time was 45 min. Final histopathological diagnosis showed a 2.8 cm-sized hepatocellular carcinoma with negative resection margin. The patient was discharged on postoperative day 6 without any complications.

Conclusion. The extrafascial and transfissural approach in laparoscopic anatomical segment V resection is feasible and effective, and allows easy and direct access to the segment V portal pedicle.

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