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ORIGINAL ARTICLE – HEPATOBILIARY TUMORS

Laparoscopic Central Bisectionectomy Including Resection of the Segment 7 Using the Extrahepatic Glissonean Approach and Hepatic Vein Guidance

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ABSTRACT

Background. Certain variations in liver anatomy can aid in parenchymal-preserving hepatectomy.[1,2] Inferior right hepatic vein (IRHV) is an accessory vein in the right side of liver draining segment 6.[2] We present a case of 67-year-old man with HBV cirrhosis. One HCC in segment 7 abutting the right hepatic vein (RHV) and another large HCC in segment 8/4a were found. After two sessions of TACE, liver resection was scheduled. Resection of RHV was inevitable to get free margin. Fortunately, a significant IRHV was present, so we could preserve segment 6. Central bisectionectomy with segment 7 resection using the Glissonean pedicle approach, and hepatic vein guided transection was planned.[3]

Methods. After placement of trocars, pneumoperitoneum was created. The main surgical steps were: (1) Right anterior Glissonean pedicle control; (2) Parenchymal transection along the umbilical fissure; (3) Transection of the right anterior portal pedicle, middle, and right hepatic vein; (4) Parenchymal transection between segments 5 and 6; and (5) Identification of IRHV and resection of segment 7.

Results. The operative time was 330 min, and estimated blood loss was 80 mL. The total intermittent inflow occlusion time was 90 min. The histopathologic diagnosis was well-differentiated HCC. The tumors size of segments 8 and 7 was 4 cm and 2.9 cm, respectively. The resection margin was negative. The patient was discharged uneventfully on postoperative day 5.

Conclusions. The preserved liver parenchyma after hepatectomy demands good vascular inflow and outflow. A large IRHV could be adequate outflow of segment 6, allowing more distinct operations.

DISCLOSURES There are no conflicts of interest.

INFORMED CONSENT The patient in this study received an explanation of the procedure and provided informed consent. This study was approved by the institutional review board.

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