



Laparoscopic Anatomic Liver Resection of the Dorsal Part of Segment 8 Using an Hepatic Vein-Guided Approach

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ABSTRACT

Background. Laparoscopic anatomic liver resection is considered highly challenging, especially in segment 8 (S8), owing to the limited angle of the laparoscope and limited manipulation of the surgical instrument^{1,2}. Additionally, resection is technically difficult when approaching the more peripheral branches since the Glissonian pedicle of S8 has several variations³ and is far from the hepatic hilum. The hepatic vein (HV)-guided approach involves entering from the cranial side of the liver while overcoming these difficulties with the unique view and techniques of laparoscopy^{4,5}. We describe laparoscopic anatomic resection of the dorsal part of S8 using the HV-guided approach for hepatocellular carcinoma.

Methods . The drainage vein of segment 8 (V8), which often runs between the ventral and dorsal parts of S8^{6,7}, was exposed from the confluence of the middle HV to the periphery. The dorsal Glissonian branch of S8 (G8dor) was identified by deep dissection of the parenchyma on the right side of the V8. The right HV (RHV) was exposed toward the periphery after dissecting the G8dor. Liver parenchymal dissection was completed by connecting the demarcation line and the RHV.

Results. The total operation time was 319 min, estimated blood loss was 5 mL, and the patient was discharged on postoperative day 6 with no complications.

Conclusion. Laparoscopic anatomic resection of the dorsal parts of S8 could be safely performed by exposing the HVs from their roots and using the HVs as a landmark to identify the intrahepatic Glissonian pedicles.

DISCLOSURE Kazuteru Monden, Hiroshi Sadamori, Masayoshi Hioki, Satoshi Ohno, and Norihisa Takakura have no conflicts of interest to declare.

ETHICAL INFORMATION AND INFORMED CONSENT Written informed consent was obtained from all patients.

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