



## Laparoscopic anatomical S7 segmentectomy by the intrahepatic glissonian approach



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### ABSTRACT

**Background:** Laparoscopic anatomical liver resection for posterosuperior lesions is challenging [1,2] A technique of anatomical liver resection with intrahepatic Glissonian approach in open surgery has been published [3]. However, few articles report this technique via the laparoscopic approach [4]. We report a case of laparoscopic anatomical S7 segmentectomy using the Glissonian pedicle approach.

**Video:** A 76-year-old male was admitted for an incidentally detected hepatic mass in segment 7 (S7). Abdominal computed tomography (CT) showed a 5.5 cm solitary tumor. First, the major Glissonian pedicle of the right posterior section was dissected, followed by hepatic parenchymal dissection peripherally until the branches of the Glissonian pedicles of segment 6 and 7 were reached. The S7 Glissonian pedicle was temporarily clamped to confirm demarcation. Dissection was then performed until the right hepatic vein (RHV) was exposed. Further dissection was then continued along the RHV, up to its root.

**Results:** Operative time was 330 minutes. The estimated intraoperative blood loss was 300 mL without a requirement for intraoperative transfusion. On postoperative day 4, the abdominal CT was performed, which revealed no abnormal findings. The patient was discharged on postoperative day 5 without any complications. Pathologic findings demonstrated a 5.2 × 3.8 × 3.1 cm hepatocellular carcinoma (pT1b) with a 2.8-cm tumor-free resection margin.

**Conclusion:** Laparoscopic anatomical S7 segmentectomy via the intrahepatic Glissonian approach is a technically demanding procedure and should be adopted for selected patients. However, this technique is feasible with careful dissection and control of the intrahepatic Glissonian pedicle.

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.suronc.2019.01.004>.

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