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Laparoscopic medial-to-lateral approach for the resection of hepatocellular carcinoma

located at the Spiegel lobe of the liver

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Disclosures

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Abstract

Background: Laparoscopic caudate lobe resection is a challenging procedure. Several researchers have reported the safety of laparoscopic liver resections ¹⁻³; however, a standardized procedure has not yet been established. Herein, we present a video showing laparoscopic Spiegel lobectomy in a patient with 6 cm hepatocellular carcinoma (HCC) using a novel approach.

Methods: A 63-year-old man with a caudate lobe HCC was referred to our hospital. Computed tomography showed a 5 × 6 cm HCC located in the Spiegel lobe, which profoundly displaced the inferior vena cava (IVC) to the lower right side, and mobilization of the Spiegel lobe was considered difficult. To perform the dissection between the Siegel lobe and IVC safely, we performed parenchymal transection along the ventral side of the IVC initially. The Spiegel lobe was then dislocated to the left side of the IVC. We dissected the left lateral side of the IVC, including the proper hepatic vein draining the caudate lobe and the left IVC ligament with a safe operative field, and successfully removed the Spiegel lobe with large HCC.

Results: The operation time was 383 min. The blood loss was 10 mL. The patient was discharged on seventh post-operative day without any complications. Histopathological examination revealed well-differentiated HCC with a negative surgical margin.

Conclusions: Laparoscopic medial-to-lateral approach with initial parenchymal transection at the medial side of the Spiegel lobe followed by dissection of the left lateral side of the IVC is considered as safe and effective procedure for large tumors in the Spiegel lobe.

Keywords: Laparoscopic liver resection, hepatocellular carcinoma, Spiegel lobe

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References

- 1. Cheung TT. Technical notes on pure laparoscopic isolated caudate lobectomy for patient with liver cancer. Transl Gastroenterol Hepatol. 2016;1: 56.
- 2. Hayami S, Ueno M, Kawai M, et al. Standardization of surgical procedures for laparoscopic Spiegel lobectomy: A single-institutional experience. Asian J Endosc Surg. 2019;12: 232-236.
- 3. Liu F, Wei Y, Li B. Laparoscopic isolated total caudate lobectomy for hepatocellular carcinoma located in the paracaval portion of the cirrhotic liver. Ann Surg Oncol. 2019;26: 2980.