




Pure Laparoscopic Right Hepatectomy for Hepatocellular Carcinoma with Bile Duct Tumor Thrombus (with Video)

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ABSTRACT

Background. Laparoscopic liver resection has been increasingly utilized due to its less invasiveness approach compared with open surgery,^{1–3} but often creates challenges. Hepatocellular carcinoma (HCC) with bile duct tumor thrombus (BDTT) portends a poorer prognosis and often precludes patients from potential liver resection.^{4–6}

We herein report a case of laparoscopic hepatectomy and thrombectomy in a patient with HCC and BDTT.

Methods. CT, ERCP, and POCS showed a 40-mm tumor located in the right lobe with BDTT. A five 12-mm trocar was inserted at the umbilicus for laparoscope, the epigastrium, both sides of the hypochondrium, and right lateral region. Moreover, a 5-mm trocar was inserted at left hypochondrium. After cholecystectomy, hepatoduodenal ligament was encircled using the tourniquet through 5-mm trocar site. The right portal vein was transected by stapler following transection of the right hepatic artery. After ICG staining (0.5 mg/body i.v.),⁷ hepatic parenchymal transection was performed using clamp-crushing technique. Moreover, CUSA also was used near Glissonian sheath. BDTT was removed from the right BD. Moreover, the

cholangioscopy confirmed no BDTT remnants. The resection stump was then sutured. Finally, the right hepatic vein was divided with a stapler. A drainage tube was placed in the right subphrenic space. Operation time was 496 min, and blood loss was 91 ml. The patient was discharged without complications on postoperative day 11. Pathological diagnosis showed moderately differentiated HCC, tumor size 40 × 45 mm with negative surgical margins.

Conclusions. Pure laparoscopic resection for HCC with BDTT is a radical, yet feasible procedure.

DISCLOSURE Naotake Funamizu, Kohei Mishima, Takahiro Ozaki, Kazuma Nakanishi, Kazuharu Igarashi, Kenji Omura, Yasutsugu Takada, and Go Wakabayashi have no conflict of interest or financial ties to disclose.

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