



## Purely laparoscopic extended right hemihepatectomy for hepatocellular carcinoma with bile duct tumor thrombus

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### ABSTRACT

**Background:** Laparoscopic liver resection (LLRs) was first introduced in the 1990s and has been performed throughout the world [1,2]. And in recent times, minor LLRs are being done for treatment of hepatocellular carcinoma [1]. Although minor LLRs appear as standardized procedures, major LLRs are still limited to few expert teams [3].

**Video:** There were severe adhesions in the peritoneal cavity due to previous cholangitis and transarterial chemoembolization (TACE). During hepatic hilar dissection, an enlarged lymph node was detected which was negative for malignancy on the frozen biopsy. Without doing the Pringle's maneuver, superficial parenchymal dissection was performed using energy device while the deep part of the liver was dissected by using a CUSA. Because partial segment IV was involved by tumor, the middle hepatic vein could not be preserved. The dilated right bile duct was identified and transected. During the resection of the duct, tumor thrombus was detected intraluminally. After complete removal of the tumor thrombus, the bile duct was closed with continuous suture. The right hepatic vein was ligated with an Endo-stapler.

**Results:** This operation took about 300 minutes and estimated blood loss was 400 ml. The patient was discharged 10 days after operation without significant postoperative complication. The histopathologic report showed a 4.2 × 2.3 × 2.2cm hepatocellular carcinoma (pT2) with clear resection margin.

**Conclusions:** This video shows the technical feasibility of laparoscopic major liver resection including extended right hemihepatectomy for hepatocellular carcinoma.

### Disclosures of statement

Authors, Kil Hwan Kim, YoungRok Choi, Ho-Seong Han, Yoo-Seok Yoon, Jai Young Cho have no conflict of interest or financial ties to disclose.

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### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.suronc.2019.10.001>.

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### Further reading

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