

VIDEO

Pure laparoscopic radical resection for type IIIa hilar cholangiocarcinoma

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Abstract

Background Pure laparoscopic radical resection of hilar cholangiocarcinoma is still a challenging procedure, in which laparoscopic lymphadenectomy, hemihepatectomy with caudate lobectomy, and hepaticojejunostomy were included [1–4]. Relative report is rare in the world up to now. Hilar cholangiocarcinoma has a poor prognosis, especially when it occurs with lymph node metastasis or vessel invasion [5, 6]. We recently had a patient who underwent a pure laparoscopic extended right hepatectomy and lymph node dissection and hepaticojejunostomy for a type IIIa hilar cholangiocarcinoma.

Methods The tumor was 20 × 15 × 12 mm in diameter and located in the right bile duct and common hepatic duct. Radiological examination showed that hepatic artery and portal vein was not invaded. After the division and mutilation of the right hepatic artery and the right portal vein, short hepatic veins were divided and cut off with clip and ultrasound knife from the anterior face of the vena cava. Mobilization was performed after the devascularization of the right liver, followed by the transection of liver parenchymal with CUSA and ultrasound knife. Finally, left hepatic bile duct jejunum Roux-en-Y reconstruction was performed.

Results This patient underwent successfully with a totally laparoscopic procedure. An extended right hepatectomy (right hemihepatectomy combined with caudate lobectomy) and complete lymph node dissection and hepaticojejunostomy were performed in this operation. The operation time was nearly 590 min, and the intraoperative blood loss was about 300 ml. No obvious complication was observed and the postoperative hospital stay was 11 days. The final diagnosis of the hilar cholangiocarcinoma with no lymph node metastasis was pT2bN0M0 stage II (American Joint Committee on Cancer, AJCC).

Conclusions Pure laparoscopic resection for hilar cholangiocarcinoma was proved safe and feasible, which enabled the patient to recover early and have an opportunity to receive chemotherapy as soon as possible. We present a video of the described procedure.

Keywords Laparoscopic resection · Hilar cholangiocarcinoma · Surgical technique

Compliance with ethical standards

Disclosures Cheng-wu Zhang, Jie Liu, De-fei Hong, Zhi-fei Wang, Zhi-ming Hu, Dong-shen Huang, Min-jie Shang, and Wei-feng Yao have no conflict of interest or financial ties to disclose.

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