

For the patient with the tumor firmly attached or invaded to the diaphragm, partial resection of the diaphragm is mandatory. After liver resection, intraoperative cholangiography may be necessary for checking bile duct injury with bile leakage. In conclusion, for huge tumors located in the hilar area, central bisectionectomy is optimal method for complete resection of tumor with more preserving non-tumorous hepatic parenchyme for safety of the patient.

We report central bisectionectomy for the giant hepatocellular carcinoma located on the hilar area to evaluate whether this procedure represent a valuable technique in this situation.

2. Totally laparoscopic living donor right hepatectomy

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Laparoscopic approach for hepatectomy is known to reduce hospital stay, decrease morbidity, improve cosmetic results and allow early return to normal life compared to open surgery. Living donors would be the patient group who would benefit most from laparoscopic approach but due to technical difficulties it has not been performed much for right hepatectomy. The author presents living donor right hepatectomy done by totally laparoscopic approach.

The right hepatectomy was done as usual manners as in open surgery. In short, after the round ligament, the falciform ligaments were dissected, the right side of the liver was mobilized up to the IVC. The right hepatic artery and right portal vein was isolated after division of the cystic artery and duct and clamped with bulldog clamp to verify the demarcation line between left and right, but was left intact during the whole procedure and the inflow control was not done. Ligasure was used to divide the parenchyma close to the capsule, but CUSA along with bipolar electro-

cautery was used for deeper dissection. After most of the liver parenchyma was divided, the bile duct was divided. The whole glissonian structure other than the artery and portal vein was left intact to preserve the microcirculation around the biliary tree to decrease possible bile duct complication in the recipient. The remnant bile duct was closed using prolene 5-0 in a continuous fashion. The retrieval bag was wrapped around the graft and 12cm Pfannentiel incision was done before division of the artery or veins to decrease warm ischemic time. Double clips were used for ligation of the artery and divided. To not sacrifice any length of PV and HV, one sided Endo-TAE was applied on the remnant donor side and cut along the stapler line after applying only a bulldog clamp on the graft side veins. The back table graft perfusion was done within 5 minutes of warm ischemic time. The donor did not require transfusion, recovered without any complication and was discharged on day 7. The recipient recovered uneventfully.

Living donor right hepatectomy by totally laparoscopic approach, although technically demanding, may be done safely in centers specialized for living donor liver transplantation and laparoscopic liver surgery. It may offer good cosmetic outcome with quicker return to normal life as long as it is done safely.

3. Laparoscopic anatomic right anterior sectionectomy of liver using a hanging maneuver and glissonian approach

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Introduction

Laparoscopic anatomical right anterior sectionectomy of liver is rarely reported due to large cut-surface area and difficulty of bleeding control.

Herein, we reported a laparoscopic anatomic right anterior sectionectomy of liver using a hanging maneuver and glissonian approach in patients for colorectal liver metastasis at 8 segment of liver

Method

A 58 year-old female patient was diagnosed with rectosigmoid colon cancer with liver metastasis. 2cm sized metastatic mass was located at deep portion of segment 8. Laparoscopic Rt. Ant. sectionectomy was firstly performed and open LAR and Lt. salpingo-oophorectomy was performed later. Firstly, we dissected the space between right and middle hepatic veins and then dissected infrahepatic IVC, so we create the space between the anterior surface of the vena cava and the posterior surface of the liver. And we placed cotton tape through the space using Goldenfinger dissector for hanging maneuver. We isolated right anterior portal pedicle, and we placed two cotton tape for hanging maneuver during parenchymal dissection. We ligated the anterior portal pedicle with hemo-weck clip. And we identified a right anterior sector along the demarcation line. Liver parenchymal dissection was continued along the demarcation line using hanging maneuver. All the parenchymal dissection was performed CUSA and harmonic scalpel.

Results

The total operating time was 595 minutes, the operating time for liver resection was 400 minutes and the total estimated blood loss was 500 ml. Diet was started a bit late at postoperative day 5 due to paralytic ileus and discharged at postoperative day 10 without another complications.

Conclusions

Laparoscopic anatomic right anterior sectionectomy of liver using a hanging maneuver and glissonian approach is a feasible and safe method for mass at 8 segment of liver.

4. No touch isolation technique in huge adrenal tumor with IVC thrombi

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Background and aims

In case with huge adrenal tumor, if tumor invaded inferior vena cava (IVC), surgical resection is difficult and there is the risk of pulmonary tumor embolism during manipulation. Furthermore, in case with functional adrenal tumor, hormone related acute change can be happened during manipulation. Therefore, many surgeons hesitate to do surgical resection. In this presentation, we reviewed 3 cases of IVC thrombectomy combined with or without major hepatectomy using no touch isolation technique.

Video contents

This video contain three cases of adrenal malignancy with liver and IVC invasion Each video clip explain three different methods for prevent pulmonary embolism and bleeding. IN three cases, the thrombosed IVC was isolated and clamp during thrombectomy. In case with IVC thrombus up to atrial entrance, veno-veno bypass was used (Case 2). In case of pheochromocytoma with direct IVC invasion, IVC was resected and replaced by Dacron graft.