

prolong the overall survival.

IV-4

A Pitfall of Hanging Maneuver in Central Bisectionectomy for the Giant HCC Located on Hepatic Hilar Area

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Introduction: A central bisectionectomy of the liver removes segments 4, 5, and 8, and this is a technically demanding operation because it requires two transection planes. For preservation of remnant right posterior and left lateral Glissonian pedicles, right hepatic vein and left hepatic vein, exact anatomical resection is necessary. However, in large tumor which is hanged on hilar area, it is difficult to determine exact resection plane because of difficult to approach the Glissonian pedicle. We report on performing central bisectionectomy with hanging maneuver for giant tumors located on hilar area to evaluate whether this procedure represent a valuable technique in this situation.

Patients and Methods: From October 2004 to February 2011, 670 patients underwent liver resection in Dong-San medical center and ten patients of them (nine of hepatocellular carcinoma and one of mass forming cholangiocarcinoma), central bisectionectomy was performed. In 3 patients (group 1), masses were located on hilar area with abutting and compromising of right posterior and left lateral Glissonian pedicles. Remaining 7 patients (group 2), masses were not contact with hilar structure. In all patients of group 1, preoperative MRCP was taken. We retrospectively analyzed surgical technique and postoperative outcome in two groups.

Results: In group 2, resection line was determined by inflow control of Glisson of right anterior section and S4. In contrast, in group 1, inflow control was impossible due to contacting mass with hilar structure, so resection line was guided by hanging maneuver. In both group, mean tumor size (8.8 vs 7.0cm), operative time (376.7 min Vs 350.5 min), resection margin (3.0mm Vs 6.4mm) were not sig-

nificantly different. In contrast to a case of post-operative complication in group 2 (ascites), bile leakage was occurred in all three patients of group 1, including a case of transaction of left lateral duct (B2&3).

Conclusion: In central bisectionectomy for giant tumor located on hilar area, hanging maneuver can guide to transect easily and safely with keeping enough resection margin bilaterally and posteriorly. However, this procedure can accompany bile duct injury, because those are not dilated and collapsed by compressing the ducts while hanging. Therefore, very careful evaluation of the biliary tree and careful transaction is demanded (This presentation includes video clip).

IV-5

What We Learned from Difficult Hepatectomy for Advanced Hepatic Malignancy

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Purpose and Method: It is difficult to resect a primary hepatic malignancy which is huge and tightly invaded or adhered to the surrounding structures, especially inferior vena cava (IVC), hepatic vein, diaphragm etc. The aim is to present five cases with favorable outcome that we have experienced as difficult resection for advanced tumor with multiple metastases, with invasion of surrounding structures, and with pulmonary embolism, and to discuss about extension of indication of hepatectomy in advanced tumor.

Results: (Case 1) a 53-year-old woman had a 16cm sized mass in the segment VIII in the imaging studies. Diagnosis is intrahepatic cholangiocarcinoma (IHCC) with left portal vein invasion. We performed a right hemihepatectomy and bile duct and left portal vein resection. At the 34-months after surgery, she is still alive without any evidence of tumor recurrence or metastasis. (Case 2) a 74-year-old man had multi-