

LV Best OP 4

The anatomical characteristics of patients with posterior bile duct stricture after a liver resection including anterior section

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Introduction : When deciding to proceed with anterior sectionectomy or central bisectionectomy, the posterior duct anatomy must be carefully reviewed due to the high variation rate and the risk of biliary complication

Methods : We reviewed the clinical data of patients who received liver resections including the anterior section such as anterior sectionectomy and central bisectionectomy from July of 2009 to September of 2018. We investigated the type of bile duct anatomy and the right hepatic duct length was measured if the classification was type A. We excluded patients without MRI and patients who underwent hepaticojejunostomy. We divided patients into 4 groups according to the bile duct anatomy and risk factor analysis for right posterior bile duct stricture

Results : A total of 69 patients received central bisectionectomy or anterior sectionectomy. The type A bile duct was most common (n=42, 60.9%) and type B was the second most type (n=12, 17.4%). Five patient (7.2%) need PTBD or ERCP procedures due to biliary stricture and occurs in only type A. The length of right hepatic duct (RHD) was related to biliary stricture (AUC=0.889) and the sensitivity was 0.8 and specificity was 0.889 when the length of RHD is 12mm. In multivariate analysis, the RHD more than 12mm was significant (OR: 47.068, 1.469 – 1508, P=0.029). The median time to biliary stricture was postoperative 34 day (5-81) and the stricture was managed with ENBD and PTBD and successfully resolved.

Conclusions : The RHD more than 12mm was the risk factor of the posterior biliary stricture in anterior or central bisectionectomy.

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