

P021**Surgical outcomes of Bismuth type IV perihilar cholangiocarcinoma**

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Introduction : Perihilar cholangiocarcinoma (PHCC) Bismuth type IV tumors is generally regarded as unresectable owing to tumor location where extends into secondary biliary radicals on both side of the liver. With optimized preoperative management and advancement of surgical techniques, aggressive surgical resection has been applied in patients with Bismuth type IV, but still challenging. In this study, we introduced our experience on surgical resection in patients with Bismuth type IV.

Methods : Between January 2000 and December 2018, 325 consecutive patients with perihilar cholangiocarcinoma underwent surgical resection at Severance Hospital, Korea. Among them, 81 patients (24.9%) present Bismuth type IV PHCC. Short term and long-term surgical outcomes were analyzed between Bismuth type IV and other types.

Results : Of the 81 patients with type IV PCCA, right sided hepatectomy was the most common procedure (44 patients) (right hepatectomy, left hepatectomy, right trisectionectomy, central bisectionectomy). R0 resection rate was 59 patients (72%). Complications of Clavien-Dindo grade III or more occurred in 43 patients (53.0%) and 11 (13.6%) died from 90 days hospital mortality. Total Complication rate was significantly higher in type IV than other type of tumors. (63.8% vs 46%, $p=0.006$). Disease free survival and overall survival were not significantly different between type IV PHCC and other type. ($p=0.592$ and $p=0.328$, respectively) In multivariate analysis, R0 resection was only significant prognostic factor for long-term survival. ($p=0.001$).

Conclusions : Although resection for type IV PHCC is technically challenging with high complication rate, aggressive tumor resection to achieve R0 resection should be considered as a first treatment to provide long-term survival.

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