

**BP PP 3-2****Are all Bismuth type IV Klatskin tumors unresectable? Impact of surgery on survival outcomes and radiologic parameters of resectability for Bismuth type IV Klatskin tumor**

Yoo Jin CHOI, Jung Min LEE, Jae Seung KANG, Hee-Ju SON, Yoonhyeong BYUN, Youngmin HAN, Hongbeom KIM, Wooil KWON, Jin-Young JANG\*

*Department of surgery, College of Medicine, Seoul National University, Korea*

**Introduction :** The Bismuth-Corlette type IV Klatskin tumor has been considered as unresectable. This study was to demonstrate survival improvement of type IV Klatskin tumor when resected, and suggest possible radiological features for R0 resectability.

**Methods :** Data on type IV Klatskin tumor diagnosed from 2008 to 2019 were retrospectively reviewed. Patients with poor general condition/liver function, distant metastasis, concomitant other cancers at the initial state, and extensive vascular invasion were excluded. Survival outcomes and radiologic parameters of bile duct tumor were compared between curative-intended resection (R0, 1 resection) and non-resection groups.

**Results :** Demographic findings of patient with curative-intended resection (n=48) and with non-resection (n=111) were comparable. Both were potentially resectable at the initial state. The most common surgical procedure was the right-sided hepatectomy (60.4%). The postoperative morbidity was 22.9% and the 90-days mortality 4.2%. There was a significant difference in median survival month among the curative-intended resection, palliative treatment, and supportive care (35, 16 and 12 months respectively;  $P<0.001$ ). In right-sided hepatectomy, shorter length of the left bile duct tumor ( $17.89 \pm 6.42$ ,  $23.74 \pm 7.48$ ;  $P<0.001$ ) and longer length of left tumor end to the umbilical point ( $25.59 \pm 7.69$ ,  $14.52 \pm 9.40$ ;  $P<0.001$ ) and in left-sided hepatectomy, shorter length of the right anterior bile duct tumor ( $17.22 \pm 6.07$ ,  $21.50 \pm 7.46$ ;  $P=0.001$ ) were observed in the curative-intended resection compared to the non-resection group.

**Conclusions :** In patients without extensive tumor extension into adjacent tissues including major vessels, aggressive surgical resection should be considered because it warrants markedly better survival than any other treatment.

Corresponding Author. : **Jin-Young JANG** ( Jangjy4@gmail.com )

Presenter : **Yoo Jin CHOI** ( goodluck-jin@hanmail.net )