Surgical Strategy of T2 Gallbladder Cancer According to Tumor Location: A Korea Tumor Registry System-BiliaryPancreas (KOTUS-BP) Database Analysis

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Lecture : Gallbladder cancer (GBC) is very rare disease. Therefore, studies based on multiinstitutional data or nationwide cancer registries are essential. The 8th edition of the American Joint Committee on Cancer (AJCC) guidelines categorizes T2 GBCs according to preoperative radiographic tumor location: peritoneal tumors are categorized as peritoneal-side (T2a) tumors and hepatic tumors are categorized as hepatic-side (T2b) tumors. Although there have been reports on the differences in the oncologic prognosis of T2a and T2b GBCs, no consensus has been reached on the survival benefit of hepatic resection for T2a and T2b GBCs. Three years ago, the Korean Association of Hepato Biliary Pancreatic Surgery launched Korea Tumor Registry System-BiliaryPancreas (KOTUS-BP) and the first study on T2 gallbladder cancer using KOTUS-BP was just finished. From KOTUS-BP Database, 707 patients with T2 GB cancer who underwent curative resection from 13 institutions between 2000 and 2015 were obtained. Among 707 patients, 309 patients had tumors on peritoneal side (T2p) and 398 patients on hepatic side (T2h). After a median follow-up period of 43 (range 3-189) months, the 5-year overall survival (79% vs. 69%, p=0.019) and disease free survival (69% vs. 57%, p=0.002) of T2p group were better than those of T2h group. There were no significant survival differences in T2p and T2h group whether to performing hepatic resection or not (81% vs.74%, p=0.314, 71% vs.65%, p=0.134) or lymph node dissection or not (78% vs.61%, p=0.055, 69% vs.65%, p=0.628). Multivariate analysis revealed that lymph node metastasis was significant poor prognostic factor (hazard ratio 2.966, 95% confidence interval 1.960-4.489, p <0.001). Recurrence occurred more frequently in T2h group (32.9% vs. 22.9%, p=0.006). Systemic recurrence was more common than loco-regional recurrence (29.0% vs.71.0%). Table 1 shows the different clinical outcomes according to tumor location in T2 GBC in previously published articles1-6. Except for the study of Jung W et al.3, patients with T2h GBC showed significant poor prognosis than the patients with T2p GBC. However, for adequate extent of surgery, especially for liver resection, the results were so heterogeneous and no conclusion could be drawn. Although several studies described there was no significant difference in survival between simple cholecystectomy and extended cholecystectomy, extended cholecystectomy could be considered till further well-designed prospective study will give an answer.