

## E-015

## Preoperative Imaging And Lymph Node No.13 Sampling In Gallbladder Cancer: Assessing The Necessity And Oncologic Outcomes

## Jaehwan JEONG<sup>1</sup>, Sunghyun KIM\*<sup>1</sup>

## <sup>1</sup>Hepato-Billary-Pancreatic Surgery, 연세대학교 세브란스병원, REPUBLIC OF KOREA

**Background** : Accurate staging is critical for proper management gallbladder cancer following surgery. Determining the involvement of lymph nodes (LN) is a key factor in staging. While sampling of LNs No.8 and No.12 around the hepatoduodenal ligament is routinely performed intraoperatively, sampling LN No.13 is more invasive, carries potential risks, and is particularly challenging in laparoscopic surgery. Therefore, the necessity of sampling LN No.13 remains a subject of debate. This study aims to detect enlargement of LN No.13 by preoperative imaging, establish an appropriate cutoff size associated with a true positive rate for LN positivity based on size, and evaluate the oncologic outcome of LN No.13 sampling.

**Methods** : A retrospective analysis of 315 patients undergoing gallbladder cancer surgery was performed. Patients were stratified into LN No.13 sampling and non-sampling groups. Propensity score matching (PSM) was applied to balance demographic and clinical characteristics between groups and mitigate selection bias. Preoperative imaging was used to assess LN No.13 enlargement, and true positive rates were assessed by size from 4 mm, the smallest size detectable by imaging. Oncologic outcomes, including overall survival (OS) and disease-free survival (DFS), were compared between groups to assess the need for LN No.13 sampling and the effectiveness of LN sampling based on preoperative imaging.

**Results** : The study showed that the sampling group had better OS (p=0.003) compared to the non-sampling group, while DFS (p=0.284) was similar between the two groups, with comparable outcomes after PSM. The LN No.13 positivity rate was significantly higher in patients with LN enlargement ( $\geq$ 4 mm, 29.0%) compared to patients without enlargement (16.9%), with a positive rate of over 50%, especially for LN size  $\geq$  7 mm (51.4%).

**Conclusions** : Enlargement of the LN No.13 on preoperative imaging was associated with a higher positive rate of the LN No.13, suggesting that using preoperative imaging to determine the need for LN No.13 sampling may be beneficial for accurate staging. Furthermore, in the group with LN No.13 sampling, OS was better compared to the group without, but there was no difference in DFS. These findings suggest that further studies with larger sample sizes are warranted to confirm these results.

Corresponding Author : **Sunghyun KIM** (ohliebe@yuhs.ac)