



ASO Author Reflections: Routine Lymphadenectomy Should be Recommended Regardless of Morphologic Subtype of Intrahepatic Cholangiocarcinoma

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PAST

Whether a routine lymphadenectomy should be performed at the time of surgical resection for intrahepatic cholangiocarcinoma (ICC) remains undetermined. Some authors advocate a routine lymphadenectomy as lymph node metastasis (LNM) cannot be accurately evaluated by preoperative imaging. Routine lymphadenectomy can help in staging nodal disease, informing adjuvant therapies, and potentially decreasing local recurrence.¹ In contrast, some clinicians only perform lymphadenectomy selectively.² Utilization of routine lymphadenectomy for ICC is increasing at major institutions worldwide.¹ Interestingly, some surgeons recommend omission of routine lymphadenectomy for mass-forming (MF) or intraductal growth (IG) subtype ICC, as these two ICC subtypes grow expansively like HCC or intraductally with perhaps a lower risk of lymphatic and perineural invasion, as well as a lower incidence of LNM.³ In fact, different morphologic subtypes of ICC indicate different etiology, distinct cellular origin, and thus different disease progression and outcomes.

PRESENT

The current multi-institutional study specifically evaluated lymphadenectomy utilization, as well as LNM relative to ICC morphologic subtypes.⁴ Overall, 1032 patients with the MF/IG ICC subtype and 150 patients with the periductal infiltrating (PI) or MF + PI subtype were included. In the analysis, surgeons seemed to rely more on preoperative nodal imaging to decide whether to perform LND among patients with MF/IG, but not PI/MF + PI ICC. However, among MF/IG patients who were node negative on preoperative imaging yet underwent lymphadenectomy, one in four was found to be nodal positive on final pathologic examination. In contrast, most patients (73.6%) with the PI/MF + PI subtype underwent LND regardless of preoperative imaging nodal status. In turn, approximately half of the patients with PI/MF + PI who had no suspicious disease on preoperative imaging had LNM on final pathology. The specificity and sensitivity of preoperative imaging analysis for LNM were low, i.e. only 74.8% and 58.5% among patients with the MF/IG subtype and 54.5% and 68.0% among individuals with PI/MF+PI ICC, respectively.

FUTURE

Given the low accuracy of preoperative imaging evaluation of nodal status among either type of ICC, a routine lymphadenectomy should be advocated at the time of surgical resection for ICC. Future works should focus on improvement of the accuracy of preoperative evaluation of lymph node status among ICC patients. Fluorine-18 fluorodeoxyglucose positron emission tomography (FDG-PET) is more sensitive than computed tomography or magnetic resonance imaging for detecting LNM in ICC; however, PET is still poor in the detection of metastatic

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disease < 1 cm.⁵ In addition, sentinel lymph node (SLN) navigation surgery has been used as a standard procedure for melanoma and breast cancer. Whether SLN navigation surgery is beneficial for ICC patients remains as yet unknown. With evidence of SLN mapping in other cancers, it is anticipated that improvement of SLN mapping might be helpful in the determination of performance or omission of lymphadenectomy or which lymphadenectomy station in each patient.

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