



ASO Author Reflections: Which Patients Benefit the Most From Lymphadenectomy During Resection for Intrahepatic Cholangiocarcinoma?

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PAST

Despite unfavorable outcomes for patients with a diagnosis of intrahepatic cholangiocarcinoma (ICC), surgery remains the mainstay of potentially curative treatment for these patients.¹ Although lymphadenectomy is essential to adequately stage the disease and decrease the risk of locoregional recurrence, the extent of lymphadenectomy and its related therapeutic benefit still remain a topic of debate.² To this end, data are needed to define the potential therapeutic benefit as well as identify the group of patients who might benefit the most from lymph node dissection (LND) to guide treatment planning and improve long-term outcomes. By using the therapeutic index—a simple metric calculated by multiplying the frequency of lymph node metastasis (LNM) in a group of patients by the 3-year cancer-specific survival (CSS) rate of patients with LNM in this particular subgroup³—we sought to examine the survival benefit of lymphadenectomy for patients undergoing resection for ICC.⁴

PRESENT

Approximately half of the 471 patients who underwent curative-intent liver resection and lymphadenectomy ($n = 205$, 43.5%) had LNM. The median number of resected and metastatic LNs were 4 (interquartile range [IQR], 2–8) and 0 (IQR, 0–1), respectively. The 3-year CSS for the entire cohort was 29.9%, reflecting a therapeutic index value of 13.0. The highest therapeutic value was noted among patients with more than seven resected LNs (17.8), followed by a CEA level lower than 5 ng/mL (16.8) and no major vascular invasion (15.0). Interestingly, an index difference of more than 10 points was noted only when the number of LN harvested was examined (1–2 LNs [4.1] vs 3–6 LNs [16.1] vs > 7 LNs [17.8]). Large index differences, although not reaching the value 10, also were noted for no major vascular invasion (index difference, 9.6; no [15.0] vs yes [5.4]), for CEA lower than 5 ng/mL (8.4; CEA \leq 5.0: 16.8 vs > 5.0 [8.2]), and for LNM at the hepatoduodenal ligament (7.3; hepatoduodenal ligament: 12.5 vs other station [5.2]).

FUTURE

Data from this study suggested that the adoption of LND for patients with major vascular invasion, preoperative CEA higher than 5.0, or LNM in extended areas may not be warranted because the additional prognostic and possible therapeutic benefit may be limited. In contrast, patients who do not have these advanced tumor features should be strongly considered for LND because the therapeutic index associated with LND suggests a greater benefit for this subset of individuals. In addition, the data demonstrated that resection of three to six LNs or more than seven LNs

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was associated with a considerable therapeutic index compared with harvest of one or two LNs. This is in line with the 8th edition of the American Joint Committee on Cancer staging manual, which recommends that 6 or more LNs be evaluated for proper staging of ICC.⁵ Future prospective studies are needed to verify the therapeutic value of LND for select patients with and without these unfavorable prognostic factors.

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