



ASO Author Reflections: Mesenteric Lymph Node Involvement in Ovarian Cancer Peritoneal Metastases

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PAST

Ovarian cancer (OC) is the fourth leading cause of cancer-related mortality due to delayed diagnosis and a lack of effective screening. A significant aspect of treating ovarian cancer with peritoneal metastases (PMs) involves cytoreductive surgery (CRS) and carboplatin-paclitaxel-based chemotherapy.¹ Achieving complete cytoreduction (CC-0) during surgery has been associated with improved overall survival (OS) and progression-free survival (PFS).² However, the role of mesenteric lymph node (MLN) involvement in locally advanced ovarian cancer remains uncertain, with conflicting results from previous studies.^{3,4} Our study aimed to assess the prevalence of MLN involvement in patients undergoing digestive resections for ovarian cancer PMs and to investigate its potential prognostic value in terms of OS and PFS.⁵

PRESENT

Our retrospective analysis included 159 patients diagnosed with advanced ovarian cancer who underwent either CC-0 or near-complete (CC-1) CRS. Among these patients, 57.14% underwent digestive resections, and MLN status was evaluated in this subgroup. Surprisingly, only 61.11% of patients who had digestive resections had their MLNs examined, revealing a lack of standardized reporting for

MLNs in ovarian cancer surgery. Our findings did not show a statistically significant association between MLN involvement and OS or PFS, though patients with MLN involvement tended to have slightly shorter OS and PFS. We also explored potential clinicopathological variables associated with MLN status, including FIGO stage, histologic type, BRCA mutations, tumor grade, depth of bowel infiltration, pelvic and lombo-aortic lymph node involvement. None of these variables had a significant association with MLN status, suggesting the need for further investigation.

FUTURE

Our study highlights the need for a more standardized approach to histopathological analysis in ovarian cancer surgery. Currently, there is no standardized reporting of MLNs in patients with ovarian cancer. To improve our understanding on the role of MLN involvement in PMOC prognosis, it is necessary to develop standardized pathology analyses guidelines, reporting MLN status post-CRS. Such reports could include detailed information on the number and location of MLNs involved, as well as relevant pathological features, such as depth of bowel infiltration, metastatic spread, or lymph node size. Future research in this field should address the limitations of our study, such as its retrospective design, limited sample size, and the influence of neoadjuvant chemotherapy. A meta-analysis and prospective studies with larger cohorts may provide more conclusive evidence regarding the association between MLN involvement and patient outcomes.

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