

Rectal Cancer

abstr 0844

Lymph Node Counts and Survival Rates After Resection for Colon and Rectal Cancer

Sandra L. Wong, University of Michigan, Ann Arbor, MI, USA

It may be important that a sufficient number of lymph nodes are removed and examined at the time of resection for colorectal cancers. More extensive nodal resection has been associated with lower rates of cancer recurrence. Obtaining more lymph nodes may also benefit patients to the extent that it allows for more accurate cancer staging and thus more appropriate use of adjuvant chemotherapy for patients with node-positive disease. Many factors affect the number of lymph nodes examined, including extent of surgical resection, patient age, tumor location, and pathology techniques. Several patient-level studies demonstrate improved survival among patients in whom a higher number of nodes are examined after resection for colon and rectal cancers.

As a result, there has been a high level of interest in using minimum lymph node counts as a quality indicator for treatment of colon cancer. Recently, the American College of Surgeons, the American Society of Clinical Oncology, the National Comprehensive Cancer Network, and the National Quality Forum endorsed a 12-node minimum as a consensus standard for hospital-based performance with colectomy for colon cancer. However, using the number of lymph nodes examined on a hospital level does not appear to significantly influence staging, use of adjuvant chemotherapy, or patient survival.

Because of the increasing emphasis on adequate radial margins for rectal cancers and use of preoperative radiation for intermediate- and high-risk tumors, whether the number of lymph nodes examined for rectal cancer will ultimately improve patient outcomes remains unclear. In fact, preoperative radiation in rectal cancers appears to be an important confounder in subsequent lymph node evaluation. Both observational and population-

based data strongly suggest that the number of lymph nodes (total and number positive) in a rectal specimen is significantly lower following administration of radiation.

Based on current evidence, there remains little controversy about the prognostic importance of higher lymph node counts for individual patients, but it is not clear that node counts are useful as an indicator of hospital quality. Using a minimum number of lymph nodes examined in colon or rectum specimens appears to be an unproven proxy for quality of resection. Adherence to oncologic principles for colorectal resections, including high vascular ligation, complete resection of the mesocolon, and total mesorectal excision (for rectal cancers), and appropriate use of multimodality treatments are emphasized.