Lymph node harvesting in colorectal carcinoma specimens

Emmanuel Lagoudianakis², Apostolos Pappas¹, Nikolaos Koronakis², Dimitrios Tsekouras¹, John Dallianoudis², Panagiota Kontogianni¹, Dimitrios Papanikolaou¹, John Chrysikos², George Karavitis², Haridimos Markogiannakis¹, Konstantinos Filis¹, and Andreas Manouras¹

¹First Department of Propaedeutic Surgery, Hippokrateion Hospital, Athens Medical School, University of Athens; ²Second Department of Surgery, 417 NIMTS (Military Veterans' Fund Hospital), Athens, Greece

ABSTRACT

Introduction. Adequate lymph node evaluation is an important determinant of prognosis in patients with colorectal cancer. Current guidelines recommend evaluation of at least 12 lymph nodes; however, a significant number of patients fail to meet these criteria.

Aim. To investigate the factors that influence adequate recovery and evaluation of lymph nodes in colorectal cancer

Methods. We retrospectively analyzed 454 consecutive cases of colorectal cancer surgically treated from September 2000 to September 2006. Univariate and multivariate linear and logistic regression analysis was used to study the effect of various factors in lymph node recovery.

Results. The number of lymph nodes retrieved ranged from 0 to 62 with a median of 13 nodes. Overall, 189 (41.6%) patients had fewer than 12 nodes removed. Patient age, tumor stage, location and size were associated with lymph node retrieval. Multivariable regression revealed that the aforementioned variables, including gender and hospital type, explained 17% of the observed variance of the lymph node number.

Conclusion. Patient and tumor characteristics, although important, are only partly responsible for the variation of lymph node yield. Quality of surgical resection and/or the thoroughness of examination of the tissue by the pathologist might explain the wider proportion of this variance. Training in colorectal node evaluation could help to improve the quality of cancer care. Free full text available at www.tumorionline.it

Key words: lymph nodes, colorectal cancer, tumor location.

Correspondence to: Emmanuel Lagoudianakis, MD, PhD, Fellow in General Surgery, Agamemnonos 17, 17456 Athens, Greece.
Tel +30-694-8529440; e-mail redemlag@yahoo.gr

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