AB046. Lymph node yield is not a reliable prognostic marker in anterior resection and abdominoperineal resection following neoadjuvant therapy for rectal cancer

Johnathon Harris¹, Christina Fleming², Muhammad Fahad Ullah², Emma McNamara², Stephen Murphy³, Martin Shelly³, David Waldron², Eoghan Condon², John Calvin Coffey^{1,2}, Colin Peirce^{1,2}

¹Graduate Entry Medical School, University of Limerick, Limerick, Ireland; ²Department of Colorectal Surgery, ³Department of Radiology, University of Limerick Hospital Group, Limerick, Ireland

Background: International guidelines recommend a minimum lymph node yield (LNY) of ≥ 12 for oncological resection in colorectal cancer (CRC). Neoadjuvant chemoradiotherapy (NACRT) decreases LNY, which questions its ability to provide accurate prognostic information. The consensus of this significance remains undetermined. This study aimed to investigate the significance of LNY on recurrence and survival following anterior resect ion and abdominoperineal resection with or

without NACRT for rectal cancer.

Methods: Prospectively collected data on patients diagnosed with rectal cancer I n a tertiary referral centre was interrogated retrospectively. Patients were divided into primary surgery and NACRT groups. Univariable analysis was performed using Fisher's exact test, *t*-test, and χ^2 test, while multivariable analysis utilised a multiple regression model. Disease recurrence and survival was analysed with logrank test for Kaplan-Meier curves.

Results: A total of 148 patients were included [56.1% (n=83) receiving NACRT]. The median L NY of the primary surgery group was 14 (IQR, 11–19) and for the NACRT group was 12 (IQR, 8–14) (P<0.001). Disease recurrence was similar in both primary surgery and NACRT groups. There was a significant decrease in overall mortality in NACRT patients (P=0.03), but there was no significant difference observed in recurrence or mortality amongst LNYs of <8, 8–11, and ≥12.

Conclusions: LNY less than 12 was not a negative prognostic indicator following NACRT and surgery for rectal cancer.

Keywords: Rectal cancer; lymph nodes; neoadjuvant therapy

doi: 10.21037/map.2020.AB046

Cite this abstract as: Harris J, Fleming C, Ullah MF, McNamara E, Murphy S, Shelly M, Waldron D, Condon E, Coffey JC, Peirce C. Lymph node yield is not a reliable prognostic marker in anterior resection and abdominoperineal resection following neoadjuvant therapy for rectal cancer. Mesentery Peritoneum 2020;4:AB046.