OC-010

THE INFLUENCE OF SURGEON AND PATHOLOGIST IN OBTAINING HIGH MEDIAN LYMPH NODE YIELDS AFTER COLORECTAL RESECTION FOR ADENOCARCINOMA

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Introduction The number of lymph nodes evaluated in resected colorectal adenocarcinoma specimens is associated with patient survival and therefore used as a marker of quality in colon cancer care.¹

The aim of this study was to assess whether individual surgeons and pathologists retrieving and analysing colorectal

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resection specimens at our centre differed in their lymph node yields (LNY).

Methods Casenotes for all elective Right Hemicolectomies (RHC) and Anterior Resections (AR) performed at our centre for adenocarcinoma between 2008–2009 were identified using hospital coding and histology reports were assessed for LNYs. Total and positive LNYs were compared between surgeons and pathologists using GnuPSPP statistical software.

Results Two dedicated colorectal surgeons and 5 pathologists produced 77 RHC and 125 AR (of which 62 were Total Mesorectal Excisions (TME)) specimens. Median total LNYs for each of our surgeons were: 22(16.5-28.6) and 23(17-31) p = 0.95 for RHC; 21(12-28) and 16(12.5-27) p = 0.37 for all ARs; and 19(9.5-25) and 15(12-24) p = 0.13 for TMEs. Positive LNYs from RHC (p = 0.5), AR (p = 0.80) and TME (p = 0.23) were also similar between the surgeons.

Of the 5 pathologists the highest and lowest median total LNYs for RHC, AR and TME specimens were: 28(21-32) to 16.5(14.5-18.5); 28(21-35) to 14.5(10-19.72); and 25(16.5-34) to 9(8.5-16.5), respectively. Oneway ANOVA testing of the 5 pathologists total LNYs for RHC, AR and TME gave p values of 0.02, 0.00 and 0.01, respectively. The pathologist with the lowest LNY after TME had significantly more specimens (57%) treated with neoadjuvant radiotherapy than the other pathologists. Comparison of positive LNYs between pathologists showed no differences in yields with p = 0.05 for RHC, p = 0.80 for AR and p = 0.23 for TME.

Conclusion Lymph node yields following colorectal resection at our centre are far higher than published yields from other centres.² No difference was seen in the LNYs delivered by the 2 surgeons studied; however, there was a significant difference in total LNYs between our 5 pathologists; with some pathologists consistently producing huge yields. This did not, however, translate to a difference in positive LNYs produced by our pathologists although our study is underpowered to demonstrate equivalence.

Competing interests None.

Keywords colorectal cancer, lymph node yield, quality.

REFERENCES

- Chang G, Rodriguez-Bigas M, Skibber J and Moyer V. Lymph Node Evaluation and Survival after Curative Resection of Colon Cancer: Systematic Review. J Natl Cancer Inst 2007;99(6);433-441.
- Gibbs P, Platell C, Reiger N, Skinner I, Jones I, Wattchow D, Chen F, Compston D, Suthar U, Kosmider S. Determinants of lymph node yield in colorectal cancer: Analysis of 9,867 patients from prospective Australian databases. *J Clin Oncol* 2008:26(15S): 4047

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