AB014. SOH21AS002. Rectal cancer surgery: does low volume imply worse outcome?—a single surgeon experience

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Background: Studies have shown that rectal cancer patients managed in high-volume centres may have improved outcomes. However, others suggest that individual surgeon caseload, specialisation and experience may be more significant in improving postoperative outcomes in rectal cancer surgery. As a low-volume, single surgeon study, we hypothesise that surgeon experience, rather than high hospital volume alone, may result in optimal surgical outcomes in rectal cancer surgery, in keeping with best international practice.

Methods: A retrospective review of a prospective single-surgeon colorectal database was conducted. Patients who underwent surgery for malignant rectal cancer between January 2004 and June 2020 (n=87) were included. Data studied included demographics, Dukes' and TNM staging, neoadjuvant treatment, pre-operative risk assessment scores, post-operative complications, 30-day re-admission rates, length of stay (LOS) and long-term survival. Data were analysed using IBM-SPSS Statistics Version 26.0. A P value <0.05 was considered significant. Primary outcome measures were 30-day mortality and long-term survival, compared to national and international standards and best practice guidelines.

Results: A statistically significant correlation was observed between P-POSSUM scores and post-operative complications (P=0.041), and all four variants of POSSUM, CR-POSSUM and P-POSSUM scores and 30-day

mortality. The mean LOS was 16.5 days (SD 6.0). The median ICU-LOS was 3 days (range, 2–17 days). Overall 30-day readmission rate was 16.4%. Twenty-four patients (26.4%) experienced ≥1 post-operative complication(s). The 30-day operative mortality rate was 3.45%. Overall five-year survival rate was 66.6%.

Conclusions: A low volume, single surgeon service may yield optimal outcomes in rectal cancer surgery that are in line with national and international standards and best practice guidelines.

Keywords: Caseload; hospital volume; outcomes; rectal cancer; surgery

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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