Defunctioning stoma in the management of malignant bowel obstruction

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Background: A defunctioning colostomy or stenting are options as bridging to definitive surgery or palliation of non-operable cases of obstructing colorectal cancer. With variable availability and outcomes from stenting, the role of defunctioning stoma is a viable option. The aim of this study was to report the clinical and cancer outcomes of those treated with defunctioning colostomy for large bowel obstruction (LBO) over a 5-year period.

Methods: A retrospective cohort study was performed reviewing data from 2013–2018 (inclusive). All patients that underwent colostomy formation for LBO were identified from Hospital Inpatient Enquiry (HIPE) department databases, local colorectal cancer patient surveillance databases and theatre logbooks. Chart data for presenting complaints, imaging modalities, time to theatre along with clinical and cancer outcomes were identified. Statistical analysis was performed using Statistical Package for the Social Sciences (SPSS).

Results: Sixty four patients were analysed. Abdominal pain was the most common presenting complaint (40.3%) with only 7.8% (n=5) of patients presenting with peritonitis. Almost 60% of patients (n=38) were obstructed due to malignancy. A transverse colostomy was the most common stoma performed (53.1%, n=34). Thirty percent of patients developed a post-operative morbidity within thirty days and the one-year mortality rate was 14.1%. Factors predictive of 30-day morbidity included advanced age [OR 1.88 (95% CI: 0.76–2.13), P=0.001] and peritonitis [OR 3.29 (95% CI: 1.06–4.32), P=0.002].

Conclusions: Defunctioning colostomy is a safe method of managing acute LBO for malignancy but should be avoided in the setting of peritonitis. This is a viable option were colonic stenting is unavailable and can facilitate delayed minimally invasive resection with its associated benefits.

Keywords: Large bowel obstruction; loop colostomy; transverse colostomy; colonic stent; colorectal cancer

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at http://dx.doi.org/10.21037/map-21-ab132). 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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doi: 10.21037/map-21-ab132