LAPAROSCOPIC MANAGEMENT OF GRADE C ANASTOMOTIC LEAK FOLLOWING LEFT-SIDED COLORECTAL RESECTION

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INTRODUCTION

Management of Grade C anastomotic leak (AL) associated with left sided colorectal resection has traditionally been performed open. With the introduction of minimally invasive surgery (MIS), laparoscopic diversion and drainage has been described to be safe and effective in managing anastomosis leak (AL) requiring surgery, however, limited literature exists to support this approach. We present our experience, review the literature, and offer procedural recommendations.

METHODS

This study is a case series that consists of six adults that underwent left sided colonic resection complicated by purulent or feculent peritonitis from 2016 to 2023 at our institution. Laparoscopy and intra-operative colonoscopy were performed on all patients. Outcomes measured included days to presentation, operative times, hospital stay, morbidity, mortality, and rates of stoma closure.

RESULTS

- From 2016 – 2023, an average of 160 colectomies were performed per year.
- Stoma Closure (6/6):
- Survival (6/6):

Table: Patient's outcome after laparoscopic management of grade C anastomotic leak following left-sided colorectal resection.

Case Number	Index Procedure	Re-operation	Re-operation Complication	Post Op Hospital Stays After Re-operation
#1	Hartmann's reversal	Laparoscopic drainage with ileostomy and colorrhapy	subhepatic fluid collection	11days
#2	Laparoscopic sigmoid colectomy	Laparoscopic Hartmann with end colostomy	none	10days
#3	Robotic sigmoid colectomy	Laparoscopic drainage with ileostomy	hematoma	11days
#4	Robotic LAR	Laparoscopic drainage with ileostomy	none	12days
#5	Open sigmoid colectomy	Laparoscopic drainage with ileostomy and endoclip placement	Infected seroma	8days
#6	Robotic LAR	Laparoscopic drainage with ileostomy and colorrhapy	subhepatic fluid collection	20days

CONCLUSION

MIS approach to Grade C AL in left-sided colorectal resection is safe and feasible. It can be performed with low morbidity and mortality and high rates of stoma closure. A review of the available literature was performed and our recent experience and recommendations are presented.

References

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