This research study received IRB approval June 2022 and is in progress. 35 patients have been captured as of October 2022.

The primary goal of this study is to evaluate anastomotic complication rates following end to end, stapled, left sided colonic resection comparing the use of intra-operative flexible endoscopy versus intra-operative rigid endoscopy in our own patient population.

### INTRODUCTION

About 60% of patients undergoing colon surgery for benign and malignant diagnoses have surgery including the left or descending colon and the sigmoid colon.

After the creation of an anastomosis, it is standard practice to examine the site intraoperatively with a sigmoidoscope to assess anastomotic integrity.

There are two types of sigmoidoscopes in use. One is rigid and the other is flexible.

Both scopes facilitate identification of anastomotic leakage, however, recent literature suggests that the flexible scope may afford better visualization and evaluation of the anastomotic site.

We hypothesize that more anastomotic bleeding will be identified using the flexible endoscope when compared to the rigid scope given the improved visualization.

In addition, we will be able to treat anastomotic bleeding with the flexible scope, a step which is not possible with the rigid scope. This may lead to a decrease in postoperative transfusions, reoperation, repeat endoscopic evaluations, length of hospital stay and anastomotic leak.

### METHODS

This study will be an analysis of surgical and post-surgical data collected prospectively in patients with end to end, left sided, stapled colonic anastomosis for benign or malignant disease.

Information will be collected from the ERAS Interactive Audit System (EIAS ®) database as well as from Epic chart review.

Data collection will include:

- **Surgical Details** i.e., surgeon, OR time, type of evaluation (flex or rigid scope), intra-operative presence or absence of anastomotic bleeding or leak.

- **Hospitalization Details** i.e., disposition, ICU LOS, hospital LOS, post-operative hematocrit/hemoglobin levels.

- **Complications** i.e., post-operative presence or absence of an anastomotic bleeding or leak, post-operative blood transfusion, readmission, reoperation, repeat endoscopy < 30 days, rate of anastomotic failure.

### OBJECTIVE

The primary goal of this study is to evaluate anastomotic complication rates following end to end, stapled, left sided colonic resection comparing the use of intra-operative flexible endoscopy versus intra-operative rigid endoscopy in our own patient population.

### STUDY PROGRESS

This research study received IRB approval June 2022 and is in progress. 35 patients have been captured as of October 2022.

### ACKNOWLEDGEMENT

REFERENCES

Sigmoidoscope graphic by s-media-cache-ak0.pinimg.com
Colonoscopy graphic by Thunder Bay General Surgeons

**Flexible Endoscopic Assessment of Left Sided Colonic Anastomoses for Diagnosis and Treatment of Anastomotic Bleeding**

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