

Two or more surgeons co-operating improve operative outcome than a single surgeon during critical decision making in left sided colorectal resections.

Introduction

Anastomotic leak is a devastating complication affecting patients as the main victim of this complication both physically and psychologically. Recent attention is starting to draw some light. on the psychological effect on anastomotic leak on the surgeon as the second victim. This is however a challenging area to study and draw direct measurable data that would help improve outcomes for both patients and surgeons. The aim of this study is to assess patients' outcomes based on the number of surgeons involved in the critical decision-making process during live surgery

Methods

All patients who underwent minimally invasive (MIS) left sided colorectal resection between February 2020 and August 2023 were included in this study. Patients were separated into two groups; single surgeon and two or more surgeons involved in the critical decision-making during surgery such as performing a primary anastomosis with or without a stoma and conversion to open surgery. Primary outcome measures were anastomotic leak rate, stoma formation rate and conversion to open surgery.

Results

248 patients have met the inclusion criteria, 175 in the single surgeon group and 73 in the two or more surgeons' group. Both groups were comparable for age, sex BMI and indication for surgery including tumour location. Median age 65years (24-91) 39% females and median BMI 28(18-44). Overall conversion rate to open surgery was 13% (33/248). There were more conversions in the single surgeon group vs two surgeon group(16% vs 7% P=0.06).There was more diversion ileostomy formation in the single vs 2 surgeon group (43% vs 26% P=0.01) and more end colostomy (Hartmann's type) in the single vs dual surgeon group (13% vs 7%). Overall anastomotic leak rate did not differ between the groups (6% vs 7% single vs dual surgeon)

Conclusions

A dual surgeon operating was associated with less conversion to open surgery, Less diversion stoma and less Hartmann's type procedure. The anastomotic leak rate was not different but could be explained by more stoma formation in the single surgeon group. Further prospective studies may shed further light on the benefits for both patients and surgeons from two or more surgeons operating.

To address the elephant in the room, there needs to be more elephants in the room