

Implementation of eras pathway cuts length of stay in half

Authors: Kelly Bahr, BSN, RN¹, Mark Horattas, MD¹, Nathan Hieb, MD¹

¹ Cleveland Clinic Akron General

Background

Postoperative hospital average length of stay (ALOS) is a major factor contributing to the high cost of surgery. Enhanced Recovery After Surgery (ERAS) pathways have been shown to improve postoperative recovery and lower healthcare costs. This is evidenced by more effective pain control with markedly reduced narcotic usage and quicker return of bowel function, which together result in a decreased length of stay. The development and effectiveness of ERAS protocols require the participation and commitment of a dedicated multidisciplinary team.

Methods

A multidisciplinary team was formed to develop our ERAS protocol. This cohesive team created a balanced, perioperative care pathway for colorectal surgical patients. Our ERAS protocol is based both on our colorectal SSI (Surgical Site Infection) prevention bundle, as well as information from several other published ERAS protocols. Each department's input facilitated its widespread adoption. The impact of our ERAS pathway on patient ALOS was assessed. All patients undergoing colorectal resection with anastomosis in 2015 (pre-ERAS) were compared to all of our ERAS patients in 2016.

Results

A total of 65 ERAS colectomies with anastomosis were performed at Cleveland Clinic Akron General in 2016 by eight different general surgeons. These patients had an average length of stay of 2.5 days. Ten patients were discharged on POD (Post-operative Day) #1 and 31 patients on POD #2. In 2015, 83 patients undergoing colorectal resection with anastomosis had an average length of stay of 5.7 days. None of the pre-ERAS patients were discharged home in less than three days postoperatively. In addition, other metrics including HCAHPS scores, narcotic usage, and return of GI function were also noted to be improved as well.

Conclusions

The success of our program is attributed to several unique features. We engaged an ERAS Nurse Navigator to educate this patient group pre-operatively through discharge and beyond. Interdepartmental ownership of our ERAS program occurred as we solicited input and also shared our successes collectively. There was 100% surgeon participation. A collaborative relationship with our anesthesia colleagues helped refine our unique ketamine-based, non-narcotic general anesthetic. It is believed that our use of long acting liposomal TAP nerve blocks for additional prolonged pain control significantly reduced narcotic administration, facilitating a more rapid return of GI function. There was a >50% reduction in postoperative ALOS for this colorectal surgical patient population. In addition, the HCAHPS scores for that same population improved and our institution had a cost savings of greater

than \$3,200 per patient. The multidisciplinary approach to creating our protocol helped to achieve its widespread adoption and the program's success exceeded our expectations.