Perioperative Pathway For Colectomy Patients

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Goals of Colorectal Surgery Carepath

- Standardize the pre-operative and intraoperative care of patients undergoing colectomy
- To attenuate the stress response to surgery
- Reduce protein catabolism by minimizing the fasting state and encouraging carbohydrate loading
- Decrease the incidence of anastomotic breakdowns and bowel edema with fluid restriction strategy
- Hasten the return of normal bowel function by using opioid sparing pain management

Lessons Learned

- The effectiveness of multidisciplinary approach to developing a protocol
- The importance of collective input in devising a protocol
- Clear communication and planning of all aspects of patient care is needed from pre-operative to postoperative periods
- The importance of education and information dissemination in order to assure compliance and protocol success

References


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NPO Guidelines

- Carbohydrate loading:
  - Patient will be ingest carbohydrate gel the day before surgery and 2 hour prior to check in the day of surgery
- Fasting:
  - No solids after midnight
  - Clear liquid until 2 hours prior to check in

Margins ordered night before

- Gabapentin 300-600mg PO x 1 OR Premgalin 75mg PO x 1.
- Acetaminophen 1000mg PO x 1
- Avoid Scopolamine patch
- Avoid Benzodiazepines unless clearly indicated for anxiety or need to do a procedure in the holding area

Induction

- Low dose opioid with induction only (consider 50-100 mcg fentanyl or 0.2-0.4mg fentanyl)
- Decadron 8mg IV post induction (caution in diabetics)

Intraop (Surgeon)

- Transverse abdominis plane block performed prior to closure by surgeons (bicarbonate 0.5% + epinephrine 1:100,000)
- Avoid post induction. Removed at end of case

Intraop (Anesthesiologist)

- Antibiotic prophylaxis: (Cefazolin 2g iv and Metronidazole 500mg (1gm for BMI >40) x 6 hrs)
- O2T post induction

Fluid management

- Start 1 L/hour in pre-op area to be infused and continued by post induction. Caution in patient’s who are unable to tolerate 1L fluid bolus
- Maintenance: 3cc/kg/hr BW (lactostring), 5cc/kg/hr BW (open)
- Body Weight (BW) determination guide:
  - <60 inches: 45 kg
  - 60 inches: 60 kg
  - >70 inches: 85 kg
- Don’t chase 100 during laparoscopic approach unless 100 is >8.5cc/kg/hr for 6 hours at which point terminate the pathway
- In the case of significant blood loss consider termination of pathway

End of Case:

- Ondansetron 4mg at end of case
- Metoclopramide 10mg at end of case (also helps with gastric motility), 5mg for patients 65-75 years old. Do not use in age >75 year old and patients with Parkinson’s disease.
- Ketorolac 30 mg IV

FACU

- Sign out to nursing that we are using a fluid restrictive strategy in this patient
  - Pain Management:
    - Dextran boluses per anesthesia post op order set
    - Tylenol 1gm IV if due should have been administered preop
    - Toradol 15-30mg IV if due should have been administered intraoperatively
- Fluid Management:
  - Sign out to nursing that we are using a fluid restrictive strategy in this patient
  - Maintenance fluids 75-100cc/hr. Urine output will be >20cc/hr
  - If patient is hypotensive 250cc LR bolus given while obtaining 5% 250cc Albumin for bolus. Communicate with anesthesia and surgical team for further management.