

DUKE ENHANCED RECOVERY

Colorectal Surgery

PREOPERATIVE PHASE

ASSESSMENT and EDUCATION in SURGICAL CLINIC

1. DEFINE EXPECTATIONS- Preoperative Counseling
 - a. Exercise
 - b. Healthy Diet and Nutritional supplements- Impact AR TID X 5 days before surgery for malnourished patients
 - c. Discharge Criteria
 - i. Ambulating independently
 - ii. Tolerating oral intake
 - iii. Pain control with oral multimodal analgesia
2. SCREEN for PONV, Frailty, Anemia, Blood Glucose
3. DISCUSS individual care pathway and multimodal analgesia plan
4. PROVIDE instructions for bowel prep if indicated
5. LABEL the patient in case request (Check box for ERAS and \pm Epidural)
6. COMPLETE Preoperative order set prior to surgery date

CONFIRMATION of OPTIMIZATION and READINESS-Pre Anesthesia Testing (PAT)

1. IDENTIFY the ERAS patient and Analgesia plan
2. REVIEW risk profile and OPTIMIZING opportunities
3. REVIEW analgesia plan with patient as indicated by surgery team (Epidural vs Non-epidural)
4. DISTRIBUTE carbohydrate drink (Clearfast-12oz) and instructions
5. DISTRIBUTE CHG sponges and instructions
6. PROVIDE written reinforcement of fasting guidelines- No food after midnight prior to surgery, Clear liquids until 3 hours before surgery and CHO drink prior to arriving at hospital
7. PHONE SCREENING- Instruct patient to drink 12oz sport drink 1 hour before arrival and shower with antibacterial soap

DAY of SURGERY, PREOP HOLDING

1. IDENTIFY ERAS patient and initiate protocol
2. DOCUMENT CHO drink (Clearfast) was taken and document time
3. DOCUMENT if bowel prep completed or not
4. REINFORCE recovery expectations with patient (pain, diet, ambulation, DVT prophylaxis)
5. PERFORM CHG wipes and clipping according to policy
6. ADMINISTER and DOCUMENT multimodal drugs
 - a. Avoid preoperative narcotics
 - b. Alvimopan 12 mg PO (bundled order)- unless on chronic opioids

- c. Gabapentin 600 mg PO
- d. Celecoxib 200 mg PO (For CrCl >30 mL/min)-provider specific, leave box unchecked
- e. PONV prophylaxis:
 - If high risk (history of PONV, history of motion sickness, female <50 years)
 - Add Scopolamine patch if 75 65years (available but unchecked)
 - Emend if > ~~75~~ 65years OR history of severe PONV with failed scopolamine patch (available but unchecked)
- f. Exparel – optional but available, leave box unchecked
- g. Epidural or other block

TEAM STEPPS with discussion of ERAS preop and intraop elements

INTRAOPERATIVE PHASE (See Additional Anesthesia Guidelines)

1. ADMINISTER VT PROPHYLAXIS
 - a. Heparin 5000 Units SC
 - b. SCD's in place
2. INSERT Foley in OR by Nursing
 - a. Send Urinalysis at time of catheter insertion (if catheter is to remain postop)
3. PERFORM Time Out with team
4. ADMINISTER ANTIBIOTIC PROPHYLAXIS
 - a. First line-Ertapenem 1g IV
 - b. Second line, only if anaphylactic allergy to Ertapenem,
 - i. Ciprofloxacin 400 mg IV+ Metronidazole 500 mg IV
5. ADMINISTER MULTIMODAL PAIN MGT during surgery
6. PREVENT PONV- Dexamethasone at start of case, Zofran at reversal
7. AVOID intraoperative IV opioids (attending anesthesiologist approval required)
8. OPTIMIZE intraoperative fluids with GOAL DIRECTED FLUID THERAPY ALGORITHM
9. MAINTAIN normothermia (Temp >36)
10. MINIMIZE tubes, lines, and drains
 - a. Remove gastric tube at time of extubation
 - b. Remove urinary catheter except when an epidural is in place or when indicated for low pelvic cases
 - c. Avoid intra-abdominal drains; pelvic drains at surgeon's discretion
11. PERFORM team debrief

POSTOPERATIVE PHASE

1. IDENTIFY patient as ERAS protocol
2. INITIATE ERAS Nursing Care Plan (Nursing)
3. ENFORCE continuous SCD usage while in bed from PACU arrival until discharge
4. CONTINUE PONV medications
 - a. Ondansetron 4mg IV q8h prn

- b. Phenergan 6.25 mg IV q6h prn
- 5. ALLOW a diet immediately-Post Surgical Bland with:
 - a. Boost High Protein (except ileostomy patients) at least once per day
 - b. Impact AR TID X 5days if taken preop or new Ileostomy patients
- 6. INITIATE bowel regimen for all patients (except those with ileostomy)
 - a. MOM 30 ml PO q 6h- until 1st bowel movement
 - b. Docusate 100 mg po BID
- 7. ENCOURAGE Gum Chewing at least 3 times per day
- 8. HOB elevated at 30 degrees at all times
- 9. ASSIST patient out of bed or up in chair on day of surgery (except rectal cases involving plastic surgery)
- 10. OUT of BED for all meals and at least 6 hours daily
- 11. AMBULATE 4 times daily beginning POD 1; increase distance each day
- 12. INITIATE VT prophylaxis at 8a POD 1
 - a. Heparin SC if epidural in place
 - b. Lovenox SC after epidural removed
- 13. TRAIN patient or caregiver to perform sc injection beginning POD 1 (nursing order)
- 14. MAINTAIN urinary catheter until discontinued (need order for nursing)
- 15. REMOVE any remaining Foley on POD 1 by 0900 or POD 2 for pelvic cases (both unchecked and provider must order one)
- 16. ENFORCE multimodal, non-narcotic pain management as first line
 - a. Scheduled Tylenol 650 mg PO q6h
 - b. Scheduled Gabapentin 100 mg PO q8h, increase to 200-300 mg q8h if necessary
 - c. Celecoxib 100 mg po q12 hr, if CrCl >30 mL/min
- 17. TRANSITION from epidural/block to oral narcotics once food is tolerated for 2 meals.
 - a. Tramadol 25-50 mg PO- 1st line
 - b. Oxycodone 5-10 mg PO prn- 2nd line
- 18. Consult Wound Ostomy Nurse for all new ostomies
- 19. Consult Case Management for Home Health Referral for all new ostomies
- 20. MAINTAIN euglycemia. Monitor blood sugar 4 times daily (q ac and hs for 24h) with intervention and on-going surveillance if >150
- 21. ENFORCE Incentive Spirometry every hour X10 while awake
- 22. CONTINUE appropriate Entereg until first BM, then D/C
 - a. Entereg 12 mg PO BID beginning POD 0 at 2200
- 23. ENFORCE defined discharge criteria
 - a. Discuss from POD 0 with patient, family, resident team, and nurse staff
 - b. Engage patient and family in monitoring recovery milestones (ambulation, diet, comfort)
 - c. Reinforce expectations and discuss regularly with PATIENT, RN staff, PRM, and family
 - d. Anticipate discharge needs
 - i. Lovenox for VT prophylaxis X 14 days post discharge
 - ii. Bowel regimen if taking narcotics- MOM and Docusate
 - iii. Tylenol 650 mg q6h scheduled X 2 weeks, then self taper

- iv. Gabapentin X 2 weeks
- v. Tramadol prn 1st line, Oxycodone 2nd line only if needed
- vi. Staple removal 10-14 days from d/c with primary care provider (PCP) or surgical clinic. Send staple remover with patient if not returning to surgery clinic.
- vii. Follow-up appointments 4-6 weeks with surgeon