DUKE ENHANCED RECOVERY

Breast Reconstruction with Free Flap Procedure

CPT 19364

PREOPERATIVE PHASE

EDUCATION in SURGICAL CLINIC

1. DEFINE EXPECTATIONS-Preoperative Counseling and Training
    a. Exercise
    b. Quit Smoking
    c. Reduce/Eliminate Alcohol
    d. Healthy Diet
2. LABEL the patient “ERAS Protocol” in procedure description of case request
3. PROVIDE written pathway and hospital expectations
4. DEFINE DISCHARGE criteria
    a. Medical criteria that the MD and team will monitor
    b. Ambulating and self-care
    c. Tolerating liquids enough to stay hydrated and to tolerate PO pain regimen

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

1. IDENTIFY the ERAS patient
2. SCREEN for anesthetic risk and OPTIMIZING opportunities
3. DISTRIBUTE carbohydrate drink (Clearfast-12oz) and instructions
4. DISTRIBUTE CHG sponges and instructions
5. PROVIDE written reinforcement of fasting guidelines- No food after midnight prior to surgery, Clear liquids until 1 hour before arrival, and CHO drink prior to arriving at hospital

DAY of SURGERY, PREOP HOLDING

1. IDENTIFY ERAS patient and initiate protocol
2. WARM ROOM to 72 degrees Fahrenheit and close door
3. DOCUMENT if CHO drink was taken and document time
4. ADMINISTER and DOCUMENT multimodal drugs on arrival to holding
    a. Acetaminophen 975 mg PO
    b. Lyrica 75 mg PO
    c. Celecoxib 400 mg PO (Naprosyn 500 mg, if sulfa allergy)
    d. Scopolamine patch
    e. Emend for high risk PONV patients

INTRAOPERATIVE PHASE

1. ADMINISTER VT PROPHYLAXIS
    a. Heparin 5000 Units SC if directed by surgeon
    b. SCD's in place
2. ADMINISTER ANTIBIOTIC PROPHYLAXIS
    a. First line-Ancef 1-2 Gm IV
    b. Second line, if anaphylactic to Ancef, then Clindamycin 600 mg IV
3. PONV PROPHYLAXIS
    a. Dexamethasone 4mg IV at start of case
    b. Zofran 4mg IV when closing
4. ADMINISTER MULTIMODAL PAIN MGT during surgery
    a. Ketamine bolus 0.25 mg/kg at induction and then q 4 hours after
    b. Fentanyl 1 mcg/kg/hr. infusion (requires attending approval for increases)
    c. Rocuronium 20 mg/hr. infusion
    d. Intraoperative Exparel injection
5. OPTIMIZE intraoperative fluids
    a. Crystalloid infusion (LR) at 3ml/kg/hr. (IBW) with boluses of crystalloid or Plasmanate as needed.
    b. Both Phenylephrine and Ephedrine use permitted until vessels are being mobilized
    c. After vessels mobilized BP management with optimization of inhalational agent, Ephedrine and Plasmanate.
    d. Plasmanate requires attending approval
6. MAINTAIN normothermia with under body warmer to maintain Temp >36
7. MINIMIZE tubes, lines, and drains
    a. No arterial lines or central lines required unless specific indication
    b. JP drains (2 abdomen, one per breast reconstructed)

POSTOPERATIVE PHASE

1. IDENTIFY patient as ERAS protocol
2. ENFORCE continuous SCD usage from PACU arrival until discharge
3. ALLOW a diet immediately (Post-Surgical Bland)
4. HOB elevated at 45 degrees at all times (Semi- Fowler/Beach Chair position)
5. BED REST POD 0 , OOB to chair POD 1
6. AMBULATE POD 2 and 4 times daily until discharge
7. OUT of BED at least 4 hours during day in addition to walks
8. MONITOR Surgical Flap until discharge- Vioptic and/or Doppler monitoring
9. ADMINISTER antibiotics 24 hours after surgery, then d/c

10. Lovenox 40mg SC in PACU and then daily starting POD 1 until discharge

ENFORCE multimodal, non-narcotic pain management as first line

- a. Tylenol 975 mg PO q6h scheduled
- b. Celecoxib 200 mg PO q12 h scheduled (Naprosyn if Sulfa allergy)
  - i. If Naprosyn needed, 500 mg q12hrs scheduled
- c. Lyrica 75 mg PO q12 h scheduled
- d. Oxycodone 5-15 mg PO q3h prn
- e. Fentanyl 25 mcg IV q1h prn x 2 for breakthrough pain, call surgery team if additional doses are needed

13. MAINTAIN optimal fluid status
    - a. Maintenance IVF at 50 cc/h starting in PACU
    - b. Stop IVF POD 1 at 0600
14. REMOVE Foley on POD 2 0600
15. MAINTAIN euglycemia. 24h q6H BS, with intervention and on-going surveillance if >150
16. ENCOURAGE Incentive Spirometry to start in PACU
17. CONTINUE laxative until first BM
    - a. Colace 100 mg BID until discharge
    - b. Milk of Magnesia 30 cc q6h until first BM, then stop
18. ENFORCE defined discharge criteria
    - a. Discuss from POD 0 with patient, family, resident team, and nurse staff
    - b. Reinforce expectations and discuss regularly with PATIENT, RN staff, PRM, and family
    - c. Anticipate discharge needs
      - i. Gabapentin 300mg TID for one week
      - ii. Aleve 500mg Q12 for one week
      - iii. Oxycodone, Zofran, Colace for home prn
      - iv. Follow-up appointments in 1 week with Plastic Surgery