DukeMedicine

Enhanced Recovery after Surgery (ERAS) Pathway

For living kidney donation

Living kidney donation pathway

DAY of SURGERY

1. Carbohydrate drink: Given to patient by preop screening to drink 1 hour before scheduled arrival time.

DAY of SURGERY, PREOP HOLDING

2. Preop nursing staff will
    a. IDENTIFY ERAS patient and initiate protocol
    b. DOCUMENT if CHO drink was taken and time
3. Multimodal analgesia and anti-emetics to be given
    a. Acetaminophen 975 mg PO
    b. Gabapentin 600mg PO
    c. Aprepitant 40mg PO for high risk PONV patients

INTRAOPERATIVE

1. VTE PROPHYLAXIS
    - Heparin 5000 Units SC in preop holding
    - SCD's in place
2. ANTIBIOTIC PROPHYLAXIS
    - First line - Cefazolin 1-2g IV. Re-dose after 4 hours.
    - Second line, if allergic to Cefazolin, then Clindamycin 900 mg IV (re-dose after 6 hours)
3. PATIENT POSITIONING
    - Document careful patient positioning with pressure points padded
    - Lower kidney rest for 5 minutes every half hour
4. LOW FLOW ANESTHESIA - suggested gas flow ≤1l/min
5. MULTIMODAL PAIN MGT during surgery
    - Fentanyl boluses
    - Intraoperative Exparel injection by surgeon
    - Acetaminophen 1g IV towards end of case, at least six hours after PO dose in preop
    - Ketorolac 15mg IV towards end of case
6. IV HEPARIN
    - Heparin to be given prior to stapling of the renal artery: **2500 IU** of heparin to be given **AT THE REQUEST OF SURGEON ONLY.** Please read out dose and time of infusion.
    - Please notify Surgeon 3 minutes after Heparin has been given
    - Reverse the heparin with 25 units Protamine (infusion or slow IV push) after the renal artery has been stapled. Please read out dose and timing of Protamine infusion

7. GOAL DIRECTED FLUID THERAPY

- Crystalloid infusion (LR) at 3ml/kg/hour (IBW)
- Boluses of colloid to optimize SV/SVV using a CO monitor
- Record initial stroke volume (SV)
    - Give a 250ml colloid bolus over <15 min (can omit if SVV < 10%)
    - If SV increases by >10 % repeat bolus
    - If SV increases by < 10% patient does not require a further bolus
    - Record peak value achieved
    - Give a further colloid bolus when SV drops 10% from peak value
    - Repeat cycle

8. URINE OUTPUT
    - Alert surgeon if < 0.5ml/Kg/hour
    - No indication (in living donor transplants) for mannitol or furosemide
    - Foley removed at end of case
9. No arterial lines or central lines required unless specific indication
10. PONV prophylaxis – dexamethasone 4mg IV at start of case, Zofran 4mg IV when closing

Revision History:

Version: 5 Created by: Timothy Miller Date: 08/2017