



## Protocol for ERAS for Gynecologic Surgery

### 12 oz carbohydrate drink:

- Given to patient by preop screening to drink before scheduled arrival time in the hospital.

### Analgesic and antiemetic management:

1. Oral Acetaminophen 975 mg (This will be on the surgical orders to be given on arrival to preop holding)
2. Oral gabapentin 600 mg (This will be on the surgical orders to be given on arrival to preop holding)
3. Scopolamine patch if indicated according to PONV algorithm
4. Low thoracic epidural:
  - T10-12
  - Hydromorphone 0.4 mg-0.6 mg (epid) before induction of anesthesia (Dilute the hydromorphone 2 mg in 10 ml NS and administer 2-3 ml). Mostly use 0.4 mg since more hydromorphone will be infused with the epidural infusion.
  - Consider 10 mg Bupivacaine bolus at least 10 minutes pre-incision
  - Run infusion of 0.125% bupivacaine + hydromorphone 10 mcg/ml (using the pre-prepared cassette) throughout case (4-8 ml/hour) as tolerated
  - GOAL IS TO AVOID IV OPIOIDS. No intraoperative IV opioids after induction without discussion with Attending Anesthesiologist. If patient is frail this may be achieved with epidural hydromorphone alone.
5. Dexamethasone 4 mg after induction (unless brittle diabetic, use promethazine 12.5 mg instead) and ondansetron 4 mg at end of surgery.
6. 15 mg IV ketorolac towards the end of the case if ok with surgeons
7. Continue to use bupivacaine 0.125%/hydromorphone 10mcg/ml in epidural in PACU and postoperatively.
8. In chronic pain patients consider adding IV ketamine infusion 4 mcg/Kg/min during surgery

### VTE Prophylaxis:

- Heparin 5000U SC can be given immediately after epidural placement. If no epidural to be used, administer some time before skin incision. May be given by nurse in Preop if no epidural planned.

### Antibiotic Prophylaxis

- a. Ancef 1-2 G for hysterectomy only
- b. Ertapenem 1G for bowel surgery
- c. No antibiotics for clean procedures.

**Goal Directed Fluid Therapy:**

1. LR infusion 3ml/Kg/hour based on IDEAL BODY WEIGHT (available to EPIC main screen under vitals)
  
2. GDFT with boluses of colloid to optimize SV/SVV using a CO monitor:
  - a. Record initial stroke volume (SV)
  - b. After incision give a 250ml colloid bolus over <15 min (can omit if hemodynamics suggest that the vascular volume is 'full' - FTc > 350ms (esophageal doppler) or SVV < 10%)
    - i. If SV increases by > 10% repeat bolus
    - ii. If SV increases by < 10% patient does not require a further bolus
    - iii. Record peak value achieved
    - iv. If still hypotensive consider phenylephrine bolus or infusion
    - v. Give a further colloid bolus when SV drops 10% from peak value
    - vi. Repeat cycle

**Gastric Tube:**

- No routine OG tube or NG tube unless there is a surgical or other indication.

**PACU Orders:**

- PCEA with bupivacaine 0.125%/hydromorphone 10mcg/ml at 5 ml infusion, 2 ml bolus, lockout period 30 min
  
- Fentanyl 25 mcg for pain score > 7 if needed in PACU (if epidural is not originally effective to keep patient comfortable while troubleshooting the epidural).

**Revision History:**

Version: 1

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