

ERAS for C-Section (Full Protocol)

Pre-Op

- Review H&P
- Confirm NPO status & allergies
- Consent
- Women should be encouraged to drink clear fluids until 2 hours before surgery*
- A light meal may be eaten up to 8 hours before surgery*
- Oral carbohydrate fluid supplementation, 2 hours before cesarean delivery, may be offered to non-diabetic women. Special formulation may be offered to diabetic women*
- Sodium Citrate 30mL for high risk patients
- Follow-up on preop labs
- Confirm appropriate T&S/T&C sent
- Blood in room if high risk of hemorrhage

Intra-Op

- 25- 40 mL/kg (IBW) crystalloid during case (excludes patients with ESRD, CHF)
- Use of Braun pump for maintenance fluid infusion
- phenylephrine gtt (start at 0.5mcg/kg/min during spinal placement)
- Fluid preloading, the intravenous administration of ephedrine or phenylephrine are potentially effective ways to reduce hypotension and the related incidence of intraoperative nausea and vomiting*
- Check & Maintain patient temp above 36.0°C, Check that room temp set to 70°F (temp foley for scheduled c/s, PR temp for failed labor with regular foley)
- Forced air warming, intravenous fluid warming, and increasing operating room temperature are all recommended to prevent hypothermia during cesarean delivery*
- Antibiotic: Cefazolin 2g (3g if >120kg) PCN allergic : clindamycin 900mg IV + gentamicin 1.5mg/kg IV
- azithromycin 500mg IV over 1 hr. for intrapartum sections
- Intravenous antibiotics should be administered routinely within 60 min before the cesarean delivery skin incision. In all women, a first-generation cephalosporin is recommended; in women in labor or with ruptured membranes, the addition of azithromycin confers additional reduction in postoperative infections*
- Ondansetron 4mg IV x 1 at start of case
- Reglan 10mg IV x1 PRN N/V for rescue

- *Antiemetic agents are effective for the prevention of postoperative nausea and vomiting during cesarean delivery. Multimodal approach should be applied to treat postoperative nausea and vomiting.*
- SAB: 1.6-2mL 0.75% bupivacaine + dextrose, 150 mcg morphine
- T4-6 level or higher to proceed. 2nd attempt at SAB if inadequate, GA with RSI for inadequate level, patient refusal, or contraindication of neuraxial
- *Regional anesthesia is the preferred method of anesthesia for cesarean delivery as part of an enhanced recovery protocol*
- Tilt table 15° for LUD
- Pitocin 30 units in 500mL infusion - 300 mL/hr. (0.03U/min). 0.5U for elective, 2U IV bolus intrapartum section x 2 doses for inadequate tone
- After closure of fascia, Pitocin 95 mL/hr.
- If poor tone, Methergine 0.2mg IM (avoid in HTN) OR Hemabate 0.25mg IM (avoid in asthma) OR Misoprostol 800 PR
- If no duramorph given, b/l TAP blocks: Ropivacaine 0.2% 20cc per side or Exparel
- 1000 mg acetaminophen IV and 30 mg ketorolac IV at skin closure
- *Multimodal analgesia that include regular nonsteroidal anti-inflammatory drugs and paracetamol is recommended for enhanced recovery for cesarean delivery*

Post-Op

- Oxycodone 5-10mg PO q3h PRN moderate pain
- Hydromorphone 0.2-0.6mg IV q2h PRN severe pain
- Ondansetron 4mg IV PRN N/V
- Hydromorphone PCA +/- TAP block if inadequate analgesia
- PACU + Duramorph order set
- Post-Op Day 1 – perform post-op assessment for PDPH, nerve injury, urinary retention, and pain control