Enhanced Recovery After Bariatrics Surgery Anesthesia Protocol

(ERABS)

Goal: To provide a safe, effective, opiate sparing, and non-emotogenic anesthetic, with the explicit goal of limiting patient adverse events, decreasing length of stay, and improving overall patient morbidity as it relates to bariatric surgery at Baylor St. Luke's Medical Center.

- Pre-Operative Holding Area
  - PONV management:
    - Scopolamine patch for all patients.
    - Consider aprepitant in severe cases of PONV and sleeve cases.
      - Currently a shortage, so use very sparingly.
      - Best given at least 45min-1hr prior to the start of anesthesia time.
  - MMA (Multi-Modal Anesthesia)
    - Tylenol: 975mg PO Elixir
    - Celebrex: 200-400mg PO Capsule (note if this and DVT prophylaxis are given, no Toradol. If no Celebrex, Toradol is ok.)
    - Gabapentin: 100-600mg PO Elixir
  - Fluids
    - 1L of crystalloid to be given prior to procedure.
- DVT prophylaxis
  - 5000 units SQ Heparin to be administered by anesthesia upon arrival in OR.
- Intraoperative
  - Standard ASA/AANA monitors.
  - +/-arterial line when warranted
- Induction with avoidance of narcotics when feasible.
  - If patient condition warrants, preferable use of fentanyl with avoidance of long-acting narcotics.
  - Suggest limiting to 100mcg or less of fentanyl when applicable.
- Maintenance:

- Strongly consider opiate free technique when feasible.
- Strongly consider TIVA technique, or partial TIVA, for anti-emotogenic properties.
    - I.e.: addition of propofol, Precedex, to inhalational regimen.
- Infusion Rates for TIVA medications:
    - Lidocaine (preferred choice):
        - 2-4mg/min
        - Make sure to discontinue within one hour of wakeup to prevent Delays or consider continuing into PACU if no TAP block done
    - Ketamine:
        - Initial bolus before incision of .5mg/kg x1 then bolus doses at .2-.4mg/kg/hr.
    - Dexmedetomidine: 0.3-0.5 mcg/kg/hr +/-bolus of .5mcg/kg over 10 minutes.
        - Can use small bolus amounts to treat elevations in BP and HR throughout case.
            - 0.2-0.4mcg/kg
            - Will cause bradycardia.
        - Can run through wake-up, or turn off 10-15 mins prior to finishing.

- Post Op Pain Control
    - Surgeon will do a TAP block in the field under laparoscopic guidance.
    - If TAP block not done consider continuing lidocaine infusion into PACU.
- Hemodynamic Control:
    - Please attempt to achieve hemodynamic control with the use of adjuncts such as ketamine, esmolol, labetalol, Precedex, and/or metoprolol.
        - All of these medications can be bolused and or placed on an infusion as above.

- Esmolol in particular has been shown to have some positive effects on pain scores when run as a background infusion.

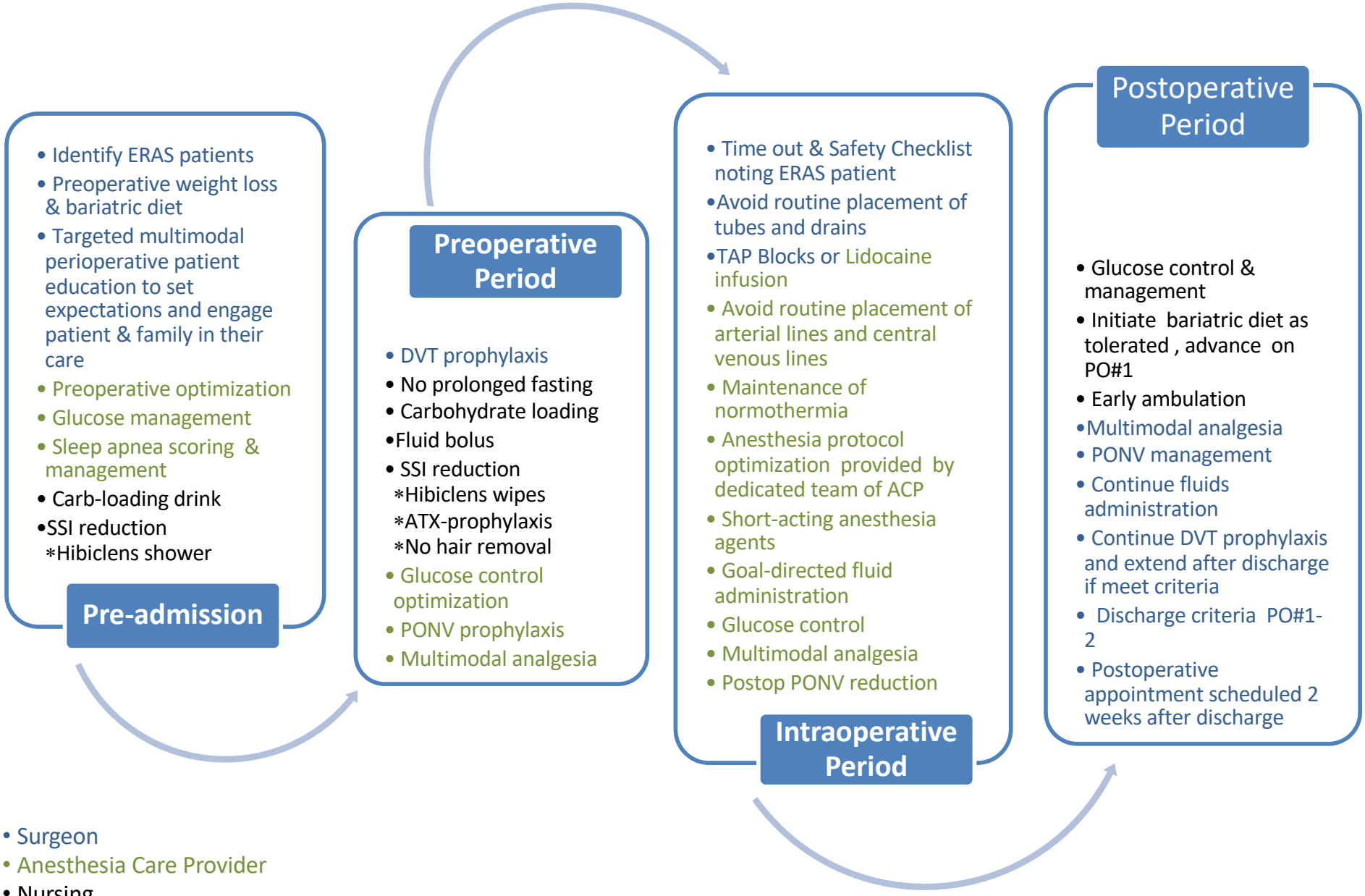
- Intra-op PONV Prophylaxis (At least 2 of the following):
  - Dexamethasone 4-8mg:
  - Consider 8mg for both anti-emetic and anti-inflammatory properties.
  - Benadryl: 12.5mg
  - Ondansetron: 4mg 20 mins before wake-up.
- Goal Directed Fluid Therapy
  - If time allows, perform fluid challenges to minimize SVV and CO variations.
  - Crystalloid/colloid fluids are acceptable. Goal is to minimize over/underresuscitation.
  - Aim 1-1.5L Positive for all but those patients with contraindications to liberal fluid administration.
- Full reversal of NMB with Sugammadex unless major contraindication exists.

- Post-Operative Care
  - PRN rescue anti-emetic agents:
    - Phenergan:
      - 6.25mg IV, or 12.5 or 25mg suppository PRN
    - Benadryl:
      - 12.5 or 25 mg IV PRN
    - Haloperidol:
      - 1mg IV x1
  - Post-op Pain control: Our goal is to minimize opioids and add schedule non-narcotic adjuncts. Non-narcotic adjuncts listed below:
    - Magnesium Infusion: 2 grams over 30 minutes in PACU.
    - Lidoderm patches 5% q24 hours. Avoid if TAP block done.
    - Tylenol: 650mg PO tablet or liquid q6-8 hours OR 650mg suppository q6-8hours
    - Gabapentin:

- Start with 100 mg PO capsule or liquid q8 hours
- May increase daily by 100 mg to 300mg PO q8 hours

- Ketorolac
  - 15-30 mg IV q6-8 hours for 72 hours
  - Avoid in patients with AKI, CKD,age > 65, or on ad hoc basis per surgeon's preference

Bariatric Surgery ERAS Protocol



- Surgeon
- Anesthesia Care Provider
- Nursing

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