Free Flap ERAS:
Pre-operative - Intraoperative

Children's Mercy KANSAS CITY | Evidence Based Practice

Pre-operative

Pre-Operative Medications & Instructions:
- Patient to drink carbohydrate-rich drink up to 2 hrs before surgery
- Midazolam per anesthesia team
- ***Order*** Citadel bed to be used immediately post-op
- ***Provide*** family with the PICU visitor policy

Pre-operatively Patient/Family Meets:
- Pre-op nurse
- Anesthesiologist
- Surgeon: *discuss possibility of NG tube*
- Child Life Specialists

Intraoperative

Multimodal Analgesia:
- ***Acetaminophen*** 10 - 15 mg/kg IV (max 1000 mg)
  - Administered at beginning of case
- ***Methadone*** 0.15 mg/kg IV
  - Administered at beginning of case
- ***Ketamine*** 5 mcg/kg/min
- ***Precedex*** infusion PRN
- ***Avoid NSAIDS***

Regional Anesthesia:

Please involve an APS physician
- Discussion needed between surgery and anesthesia regarding pain management
- Peripheral nerve catheter preferable over single-shot nerve block (unless contraindicated)
  - Catheter may also be placed by surgeon
    - May need On-Q pump
  - Use connector swivel lock on catheter to prevent pulling and alarming
- Most flaps will be upper or lower extremity reconstructions
  - If location is truncal, consider ESP or TAP catheters
  - Avoid epidurals due to possibility of systemic anticoagulation
- Nerve catheter infusion:
  - Ordered by APS Team utilizing ropivacaine 0.1-0.2% with max dose 0.5 mg/kg/hr

- **Antibiotics:**
  - Discuss at huddle and administer prior to incision
- **Antiemetics:**
  - ***Dexamethasone*** 8-10 mg IV (max 12 mg)
  - ***Ondansetron*** 0.15 mg/kg IV (max 4 mg)
- **Anticoagulation** (for take backs or revision anastomoses only)**:**
  - Heparin dose 75 Unit/kg followed by therapeutic drip per Hematology

Contraindications for nerve catheter:
- Patient/family refusal
- Coagulopathy
- Active infection at site of catheter or bacteremia
- Local anesthetic allergy

Maintenance of Anesthesia:
- **Volatile** or **TIVA** maintenance at discretion of anesthesiologist
- **Normothermia:**
  - Utilize Bair Hugger
  - Goal intraoperative temperature 36º - 38º C
- **Euvolemia:**
  - Goal is clinical euvolemia; Plasmalyte at 3 - 7 ml/kg/hr (additional as clinically indicated)
- **BP Management:**
  - Aim for normal to hypertensive with MAP goal > 65 mmHg
  - If vasoactive agents needed, discuss with surgeon regarding which agent to use
- **Blood gas analysis** q 2 - 3 hours
  - Discuss with surgeons regarding Hb goal
  - Low threshold to start arterial line

Abbreviations:
APS = Anesthesia Pain Service
ERAS = Enhanced Recovery After Surgery
MAP = Mean Arterial Pressure
NG = Nasogastric
PICU = Pediatric Intensive Care Unit
TIVA = Total Intravenous Anesthesia

Postoperative - PICU

Patient to be transported directly to PICU on pressure offloading bed

Free Flap ERAS: Postoperative to PICU Algorithm

This clinical pathway is meant as a guide for physicians and healthcare providers. It does not establish a standard of care, and is not a substitute for medical judgment which should be applied based upon the individual circumstances and clinical condition of the patient. Printing of Clinical Pathways is not recommended as these documents are updated regularly . Copyright © The Children's Mercy Hospital 2026. All rights reserved.