Cardiac Surgery: Thoracotomy
Enhanced Recovery After Surgery (ERAS)

Children's Mercy KANSAS CITY | Evidence Based Practice

Preoperative Goals For Thoracotomy Surgery

QR code for mobile view

Arrival to Same Day Surgery for check in

Preoperative Care
- ***Carbohydrate-rich drink up to 2 hours before surgery***
- ***Anxiolysis***
  - Midazolam per anesthesia team

Prior to surgery patient/family meets
- Pre-op nurse
- Anesthesiologist
- Surgeon
- Child Life Specialists

Transfer to OR

Intraoperative Goals For Thoracotomy Surgery

Prevention of Postoperative Delirium:
- Dexmedetomidine infusion 1 mcg/kg/hr (to be decreased to ≤ 0.5 mcg/kg/hr before leaving OR)

Prevention of Postoperative Nausea/Vomiting:
- IV dexamethasone (0.1mg/kg)
- IV ondansetron (0.15 mg/kg)

** For patients aged 2 and older*

Multimodal Analgesia:
- Fentanyl boluses prn
- Avoid long-acting opioids (morphine and hydromorphone)
- IV acetaminophen: 12.5 mg/kg (max 1000 mg)
- Erector spinae plane (ESP) block
  - Single shot vs catheter in older (>5 yo) patients

Muscle Relaxants:
- Reversal of muscle relaxant prior to leaving operating room (sugammadex or neostigmine/ glycopyrrolate)
- Spontaneous ventilation upon arrival to CICU

Temperature Management:
- Achieve normothermia (36 to 38 C) prior to leaving operating room

Prior to leaving the OR for CICU
- Pre-Transport Timeout with CVOR RN
  - Dexmedetomidine decreased?
  - PONV prophylaxis?
  - IV acetaminophen?
  - Muscle relaxant reversed?

Transfer to CICU

Algorithms:
- Prior to Surgery
- Intraop - Bypass
- CICU
- Inpatient

Abbreviations:
CICU = Cardiac Intensive Care Unit
CVOR = Cardiovascular Operating Room
PONV = Post operative nausea and vomiting

Contact: EvidenceBasedPractice @cmh.edu

Link to synopsis and references

Last Updated: 8.05.2025

This ERAS 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 2025. All rights reserved.