

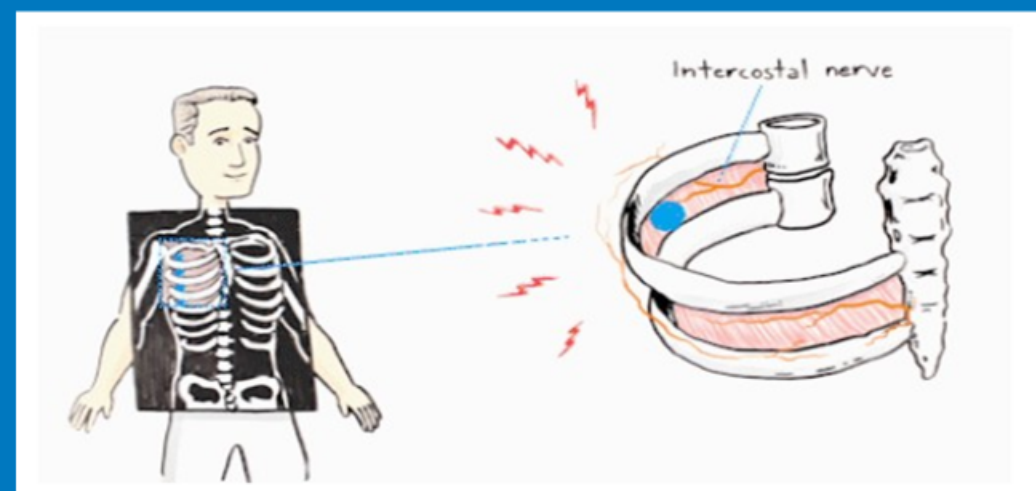
Reducing Opioid Use in Thoracic Surgery Patients: A Multi-Modal Approach

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Can a multimodal, opioid-sparing analgesia protocol improve postoperative pain control and reduce opioid consumption in thoracic surgery patients?

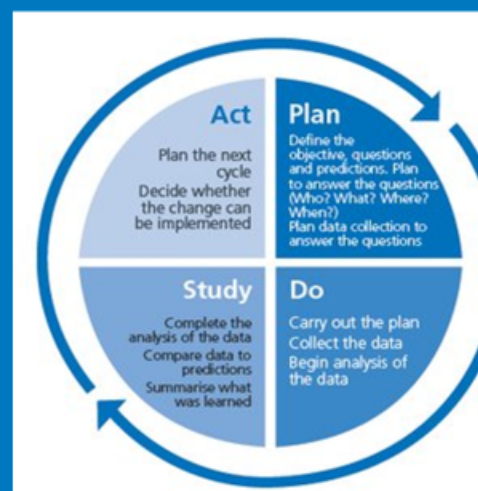
Background

- Thoracic surgery is associated with severe post operative pain, often requiring large opioid doses
- High opioid use can lead to respiratory depression, delayed ambulation, and prolonged length of stay (LOS).
- Multi-modal analgesia (MMA) decreases opioid requirements and improves recovery.
- Average 48 hr MME = 80-120mg pre-intervention



Why So High Risk ??

- Pain from rib spreading
- Severe pain → decreased mobility → increased complications
- Opioids → respiratory suppression (critical in lung surgery)



Results

Initial data indicates:

- ↓ Postoperative opioid use by 45%
- ↓ Incidence of PONV by 30%
- ↑ Patient-reported satisfaction scores
- Early ambulation ↑ from 42% to 78% by POD 1

Implementation

Multidisciplinary team approach

Focused on:

- Staff education (Anesthesia, Nursing, Surgeons/Fellows, RNAs)
- Protocol integration across perioperative continuum
- Standardize order-sets
- PACU/Floor tracking of non-opioids as first approach
- Opioid prescribing consistent across service

Description of Protocol

The intervention combines pharmacologic and nonpharmacologic strategies, including:

Preoperative:

- Acetaminophen (Tylenol)
- Patient education on postoperative expectations
- Baseline pain score and risk assessment

Intraoperative:

- IV NSAIDS
- Low dose ketamine/dexmedetomidine
- Surgical site local analgesia
 - Intercostal nerve blocks
 - Regional block
 - Serratus anterior
 - Cryoablation (“Cryo nerve block”)
- Proper positioning

Postoperative:

- Epidural or alternative regional technique
- Scheduled non-opioids
- Early ambulation
- Pulmonary hygiene
- Structured patient education
- ERAS-aligned nonpharmacologic care



The protocol is nurse-led and multidisciplinary, with nurses playing a pivotal role in patient education, intraoperative positioning, and promoting adherence to ERAS components.

Conclusion / Discussion

- MMA significantly ↓ opioid use without compromising pain control
- Cryoablation and rib blocks provide strong early pain relief, enabling early mobility
- Consistency, staff education and high nurse engagement = key to success

Perioperative Nursing Implications

Nurses lead the way for pain management initiatives.

They are empowered to:

- Educate patients
- Promote non-opioid strategies
- Coordinate multidisciplinary care

Protocol reinforces nursing’s impact on recovery and quality of care.