Evidence-based guidelines for non-opioid pain management after abdominal laparoscopic surgery: what does the evidence actually show?

Bronwyn Southwell, MD
The Managing Pain After Laparoscopic Surgery (M-PALS) Collaborative
Dept. of Anesthesiology, University of Minnesota

Introduction

The Managing Pain After Laparoscopic Surgery (M-PALS) Collaborative supports evidence-based pain management following laparoscopic surgery.

Why this matters:

- NASEM identified a gap in appropriate opioid prescribing and pain management guidelines for abdominal MIS.
- Opioid prescribing practices vary with many exceeding CDC, state and other guidelines.
- Excess circulating opioids lead to OUD, diversion, and chronic use.

Solution:

- Rigorous SR & MA to inform guidelines and future areas of research for managing pain and appropriate opioid prescribing in this population

Methodology

- **Systematic review** of RCTS evaluating interventions for adults undergoing abdominal or pelvic laparoscopic surgery (Table 1).
- **A multidisciplinary guideline panel** used a modified GRADE Evidence-to- Decision framework with asynchronous voting to develop recommendations regarding **regional anesthesia, intraperitoneal/preperitoneal local anesthetic instillation, and gabapentinoids.**

M-PALS Guideline Recommendations

There is ***insufficient evidence*** for or against the use of the following interventions in addition to usual care, to reduce perioperative pain and total postoperative opioid consumption or opioid prescriptions at discharge:

1) **Preoperative gabapentin**
2) **Intraperitoneal or preperitoneal local anesthesia**
3) **Regional anesthesia**

Lessons Learned

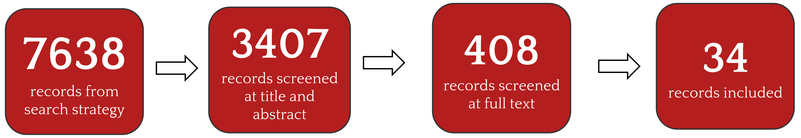
- **Heterogenous evidence limits pooling and SOE findings**
  - **Standardized design and outcome reporting is needed**
- **Patient representatives in a guideline panel is essential but requires more engagement than anticipated**
- **Engaging a guideline panel without voting in-person is feasible but requires strategic asynchronous coordination**



Table 1. PICO Table

	Included	Excluded
Popula-tion	Adults undergoing abdominal laparoscopic and/or robotic surgery for therapeutic or diagnostic purposes	Obstetrical and immediate post-partum and/or breastfeeding patients Pediatric patients (<18 yrs old)
Inter-vention	Regional anesthesia Intraperitoneal or preperitoneal instillation of local anesthetics Gabapentin	Other interventions
Com-parator	Opioid-only regimens Another pain management technique	Comparisons of dosage, timing, or method of delivery
Out-comes	Subjective pain experience rating AND opioid consumption	Only pain rating or opioid consumption, other outcomes
Other	Randomized controlled trials ≥50 participants randomized per study arm International settings	Other study designs Not peer-reviewed manuscripts

Figure 1. Literature Search Results



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*M-PALS Collaborative includes: Bronwyn J Southwell, M.D.(MPI); Elizabeth Wick, M.D.(MPI); Genevieve B. Melton, M.D., Ph.D.(MPI),,
Mary Butler, Ph.D., M.B.A.(MPI); Romil R. Parikh, M.B.B.S., Ph.D.; Sallee Brandt, M.P.H.; Luz Angela Choconta-Piraquive, M.D.; Swathi Pagadala, Pharm.D.; Madison M. Kolbow, M.D.; Gabriella L. Lott, B.A.; Drew J. Persson, M.P.H.; Amy M. Claussen, M.L.I.S.; Christopher J. Tignanelli, M.D., M.P.H., M.B.A.; Miranda Considine, D.O.; Timothy Wilt, M.D.,M.P.H.,; Shahnaz Sultan, M.D.; Aaron Berg, D.O.; Christie Martin, Ph.D.,M.P.H., R.N.; Matthias Behrends, M.D.; Paolo Goffredo, M.D.; Elliott Haut, M.D.; Amy Lawson, Rebecca Johnson, M.D.; Sanjay Reddy, M.D; Patricia Sylla, M.D