

Epidural Long-Acting Opioids for Post-LUSCS Pain: Efficacy, Safety, and Side Effects

Northern Health

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RESEARCH WEEK
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INSPIRED RESEARCHERS
Northern Health

Aims

1. Evaluating the analgesic efficacy of Epidural Morphine (2 mg) top-ups, Epidural Fentanyl, and Intrathecal Morphine in Lower Uterine Segment Caesarean Sections within the first 24 hours at Northern Health.
2. Assessing the safety and side-effects of Epidural Morphine, Intrathecal Morphine, and Epidural Fentanyl within the first 24 hours.

Methods

Retrospective single-site audit of routinely collected paper-records of patients (n = 480) who underwent a LUSCS operation from June to December of 2022. Data collected included mode and opioid of neuraxial anaesthesia, type and dose of oral opioids, resting pain scores <24 hours, time to first opioid administered post-operatively, charting of regular paracetamol and NSAID, administration and dose of anti-emetics, administration of anti-pruritic and aperients, MET call data for respiratory depression. QA Approval Number: 60.2024

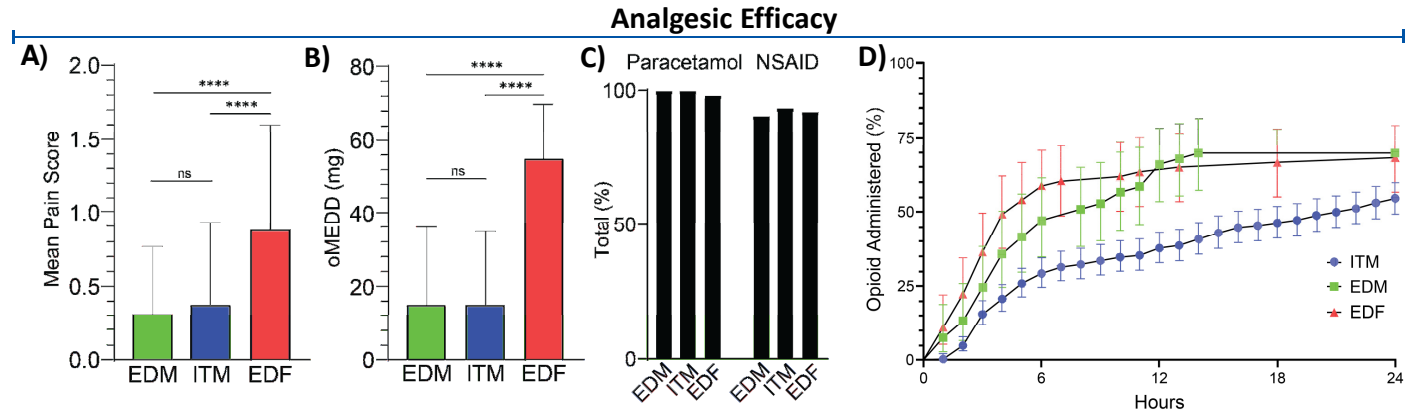
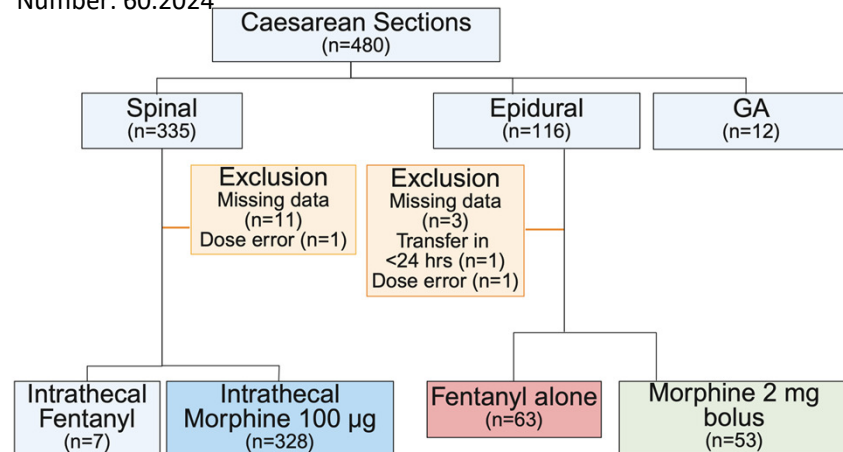


Figure 1. Column graphs representing the efficacy of analgesia for epidural morphine (EDM), intrathecal morphine (ITM), and epidural fentanyl (EDF) over the first 24-hours post-LUSCS. **A)** Mean pain scores. **B)** Mean oral morphine equivalent daily dose (oMEDD) consumption. **C)** Regular secondary non-opioid analgesic prescription rates. **D)** Time-of-survival analysis of pain breakthrough by time to the first opioid to be consumed for each patient group. Median and error bars indicating interquartile ranges. **** p-value <0.0001.

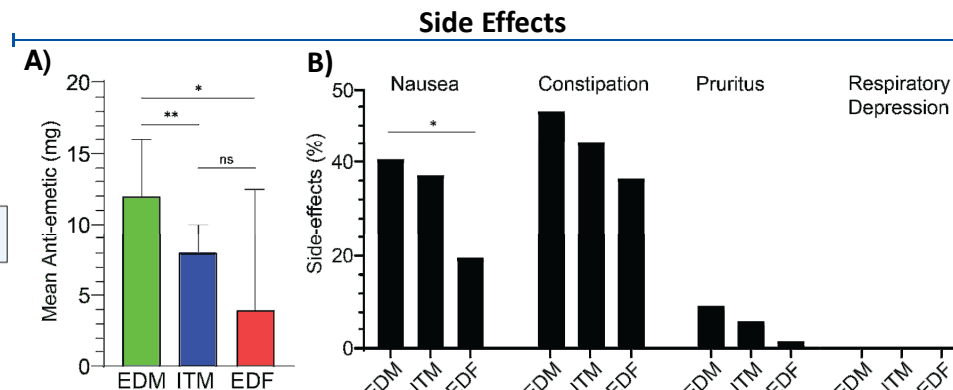


Figure 2. Column graphs of the frequency of side-effects experienced by the EDM, ITM, and EDF treatment groups. **A)** Mean anti-emetic consumption amount of each analgesic technique. **B)** Frequency trend of side-effects with the greatest side effect profile. * p-value <0.05, ** p-value <0.005.

Conclusions

Aim 1:
Epidural morphine and intrathecal morphine have superior analgesia efficacy compared to epidural fentanyl in the first 24-hours.

Aim 2:
Epidural morphine has an increased frequency and severity of nausea, with comparable other side effects.