

## INTRODUCTION

Effective analgesia is essential in enhanced recovery pathways after elective colorectal surgery. It allows early mobilization, reduces complications and length of stay. This audit aims to assess local compliance with ERAS society-recommended multimodal analgesia, in combination with spinal/epidural analgesia or abdominal wall blocks when indicated, for elective colorectal patients.

## METHODS

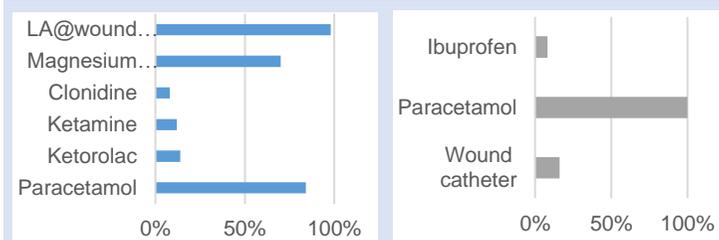
We reviewed medical records and conducted interviews for 50 patients (74% age  $\geq 60$ ) undergoing elective colorectal surgery between Aug and Dec 2021.

### Type of surgery (N=50)

Open bowel resection	10	20%
Laparoscopic bowel resection	36	72%
Reversal of stoma	4	8%

Data was retrospectively collected on their peri-operative analgesic use and post-operative pain scores in the first 36 hours.

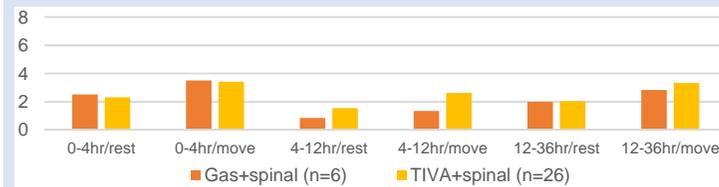
## RESULTS



**Fig 1. Intra-op use of opioid-sparing analgesia (N=50)**

**Fig 2. Post-op use of opioid-sparing analgesia (N=50)**

- There is satisfactory compliance with opioid-sparing multimodal analgesia using paracetamol, Magnesium Sulphate, and long-acting local-anaesthetic infiltration at incision site.
- NSAIDs, ketamine and clonidine were used to a lesser extent.



**Fig 5. Average post-op pain score after elective laparoscopic bowel resection using gas or TIVA in addition to spinal anaesthesia (N=32)**

- There is little difference in the post-op pain scores between those who received inhalational anaesthesia or TIVA for laparoscopic bowel resections.

## CONCLUSIONS

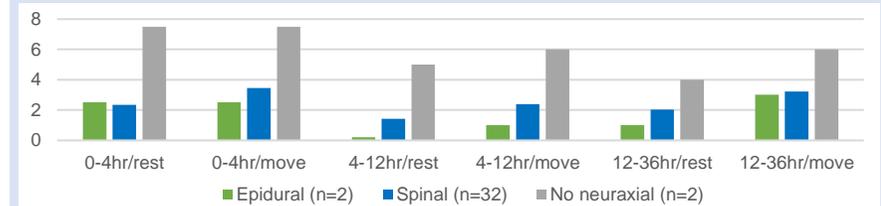
- We should continue the current good practice on the use of multimodal opioid-sparing analgesia and neuraxial analgesia
- TEA provides effective analgesia in laparotomy, whereas SA has as good an analgesic effect as TEA in laparoscopic cases. We therefore encourage TEA for elective laparotomy and laparoscopic cases at high risk of conversion.
- The use of abdominal wall blocks is encouraged when appropriate, though more data is required to comment on its effectiveness.
- We also encourage the use of other opioid-sparing agents such as NSAIDs, ketamine,  $\alpha$ -2 agonists, or lidocaine infusion in suitable cases.

### Reference:

- Gustafsson UO, Scott MJ, Hubner M. (2019) Guidelines for Perioperative Care in Elective Colorectal Surgery: Enhanced Recovery After Surgery (ERAS) Society Recommendations: 2018. World J Surg 43: 659-695.



**Fig 3. Average post-op pain score after elective laparotomy (N=10)**



**Fig 4. Average post-op pain score after elective laparoscopic bowel resection (N=36)**

- Neuraxial analgesia was used in 92% of patients.
- Laparotomy patients who received thoracic epidural analgesia (TEA) had low average pain scores in the first 36 hours at rest and on movement. Those who received spinal analgesia (SA) had less adequate pain control, especially when they attempt to mobilize.
- Patients who received TEA or SA for laparoscopic bowel resections had similarly low post-operative pain scores at rest and on movement, but pain control for those without neuraxial analgesia was poor.