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Do rectus sheath blocks enhance analgesia with intrathecal opiates?

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Background

- Intrathecal opiate (ITO) is established practice for major colorectal surgery in our institution.

Khot U, Ratnalikar V et al,

Short-term outcomes with intrathecal versus epidural analgesia in laparoscopic colorectal surgery.

Br J Surg, 97: 1401–1406. 2010.

- ITO used for the majority of open colorectal procedures.

Background

- Increasing use of USS guided abdominal wall blocks.
- Multimodal analgesia with bilateral rectus sheath blocks (RSB) for open procedures with midline incisions.
- AIM: Assess benefit of ITO plus rectus sheath block for open colorectal procedures.

Methods

- 40 patients post open (midline) colorectal procedures.
- One consultant anaesthetist.
- All patients received intrathecal opiate.
 - Diamorphine – 0.8mg to 1.7mg (mean dose 1.5mg – both groups)
 - Marcaine 0.5% - 1.5 to 2 mls
- 20 patients had ITO alone.
- 20 patients had ITO plus rectus sheath block.
 - USS guided – post operatively
 - up to 20ml 0.5% chirocaine each side
- All patients had post operative Fentanyl PCA

Methods

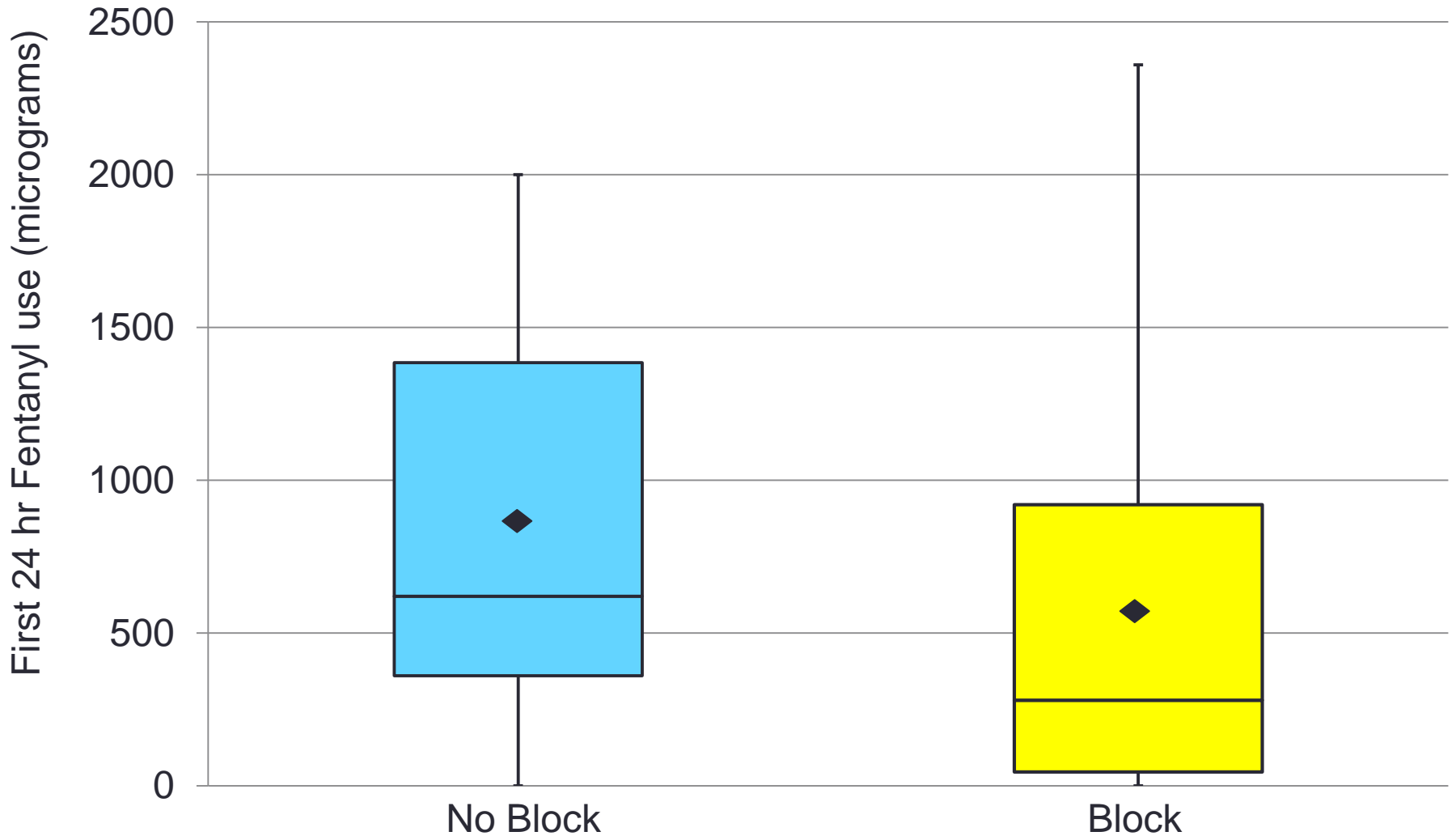
- Retrospective analysis of acute pain team data.
- All patients were visited day 1 post op on acute pain round.
- PCA use recorded – total dose delivered.
- Pain score recorded – (0-3)

Results – PCA Fentanyl use day 0-1

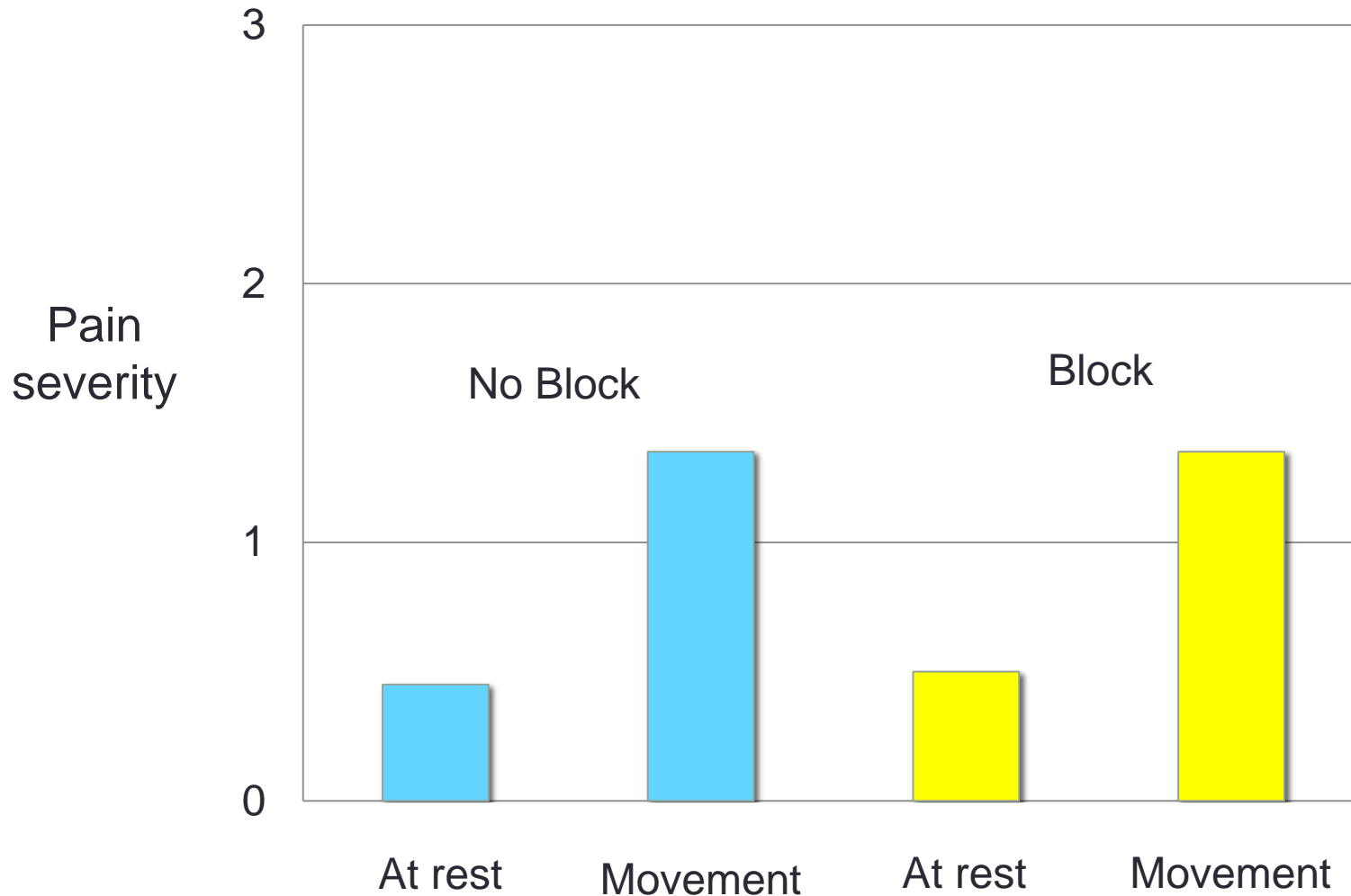
- Mean Fentanyl dose ITO alone
 - **830 mcg** (Range 0- 2000)

- Mean Fentanyl dose ITO plus RSB
 - – **555 mcg** (range 0 – 2340)

PCA Fentanyl use day 0-1



Mean Pain Scores Day 1



Discussion

- Apparent opiate sparing effect of RSB.
 - increase of LA catheters to prolong benefit of RSB?
- Methodology problems
 - does not assess any immediate post operative benefit.
 - does not reliably assess recovery analgesia.
- Larger numbers required to prove statistically significant difference.

Summary

- ITO for open colorectal surgery is effective
- RSB as an adjuvant appears to have an opiate sparing effect
- Our method does not assess immediate post operative effect of RSB. We hope to show this in the future.

Study Contributors

- Geraldine Craven, Jane Jones along with acute pain team
- Mr Chandrasekaran, Consultant Colorectal Surgeon
- Prof Umesh Khot, Consultant Colorectal Surgeon
- Dr Vinay Ratnalikar, Consultant Anaesthetist

References

- Dutton TJ, McGrath JS, Daugherty MO. Use of rectus sheath catheters for pain relief in patients undergoing major pelvic urological surgery *BJU Int* 2013 Aug 13;113(2):246–53.
- Virlos, I., Clements, D., Beynon, J., Ratnalikar, V. and Khot, U. (2010). Short-term outcomes with intrathecal versus epidural analgesia in laparoscopic colorectal surgery. *Br J Surg*, 97: 1401–1406.
- Bashand G, Eikholy A. Reducing Postoperative Opioid Consumption by Adding an Ultrasound-Guided Rectus Sheath Block to Multimodal Analgesia for Abdominal Cancer Surgery With Midline Incision. *Anesth Pain Med*. 2014 Aug; 4(3):

Questions?

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