Do rectus sheath blocks enhance analgesia with intrathecal opiates?

Dr Tom Moses, ST6
Dr Vinay Ratnalikar, Consultant Anaesthetist
Morriston Hospital
ABM University Health Board, Swansea
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.

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

First 24 hr Fentanyl use (micrograms)

- No Block
- Block
Mean Pain Scores Day 1

Pain severity

No Block

Block

At rest 0

Movement 3

At rest 0

Movement 3
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


Questions?
Questions?