ANALGESIA FOR LAPAROTOMY
CONSULTANT TEACHING 2016
KRIStOF BAtIZI

ENHANCED RECOVERY

Kehlet’s key elements
Gut dysfunction
Pain
Immobility
Enhanced recovery from surgery in the UK: an audit of the enhanced recovery partnership programme 2009–2012

J. C. Simpson¹, S. R. Moonesinghe¹,², M. P. W. Grocott¹,²,³, M. Kuper⁴, A. McMeeking⁵, C. M. Oliver¹,², M. J. Galsworthy¹,², and M. G. Mythen¹ on behalf of the National Enhanced Recovery Partnership Advisory Board¹
Neuraxial block, death and serious cardiovascular morbidity in the POISE trial


Results. Neuraxial block was associated with an increased risk of the primary outcome [287 (7.3%) vs 229 (5.7%); odds ratio (OR), 1.24; 95% confidence interval (CI), 1.02–1.49; P=0.03] and MI [230 (5.9%) vs 177 (4.4%); OR, 1.32; 95% CI, 1.07–1.64; P=0.009] but not stroke [23 (0.6%) vs 32 (0.8%); OR, 0.76; 95% CI, 0.44–1.33; P=0.34], death [96 (2.5%) vs 111 (2.8%); OR, 0.87; 95% CI, 0.65–1.17; P=0.37] or clinically significant hypotension [522 (13.4%) vs 486 (12.1%); OR, 1.13; 95% CI, 0.99–1.30; P=0.08]. Thoracic epidural with general anaesthesia was associated with a worse primary outcome than general anaesthesia alone [86 (12.1%) vs 119 (5.4%); OR, 2.95; 95% CI, 2.00–4.35; P<0.001].

Conclusions. In patients at high risk of cardiovascular morbidity, neuraxial block was associated with an increased risk of adverse cardiovascular outcomes, which could be causal or because of residual confounding.

Regional anaesthesia

Neuraxial block and postoperative epidural analgesia: effects on outcomes in the POISE-2 trial†

K. Leslie1,2,3,4,6, D. Mclroy6, J. Kasza6, A. Forbes6, A. Kurz6, J. Khan7,8,9,10, C. S. Meyhoff12, R. Allard12, G. Landoni13, X. Jara14, G. Lurati Buse15, K. Candioti16, H.-S. Lee17, R. Gupta18, T. VanHelder19, W. Puraydi20, S. De Hert21, T. Treschan22 and P. J. Devereaux1,3,4,8,9,23

Results: Neuraxial block was not associated with the primary outcome [7.5% vs 6.5%; odds ratio (OR), 0.89; 95% CI (confidence interval), 0.73–1.08; P=0.24], death (1.0% vs 1.4%; OR, 0.84; 95% CI, 0.53–1.35; P=0.48), myocardial infarction (6.9% vs 5.5%; OR, 0.91; 95% CI, 0.74–1.12; P=0.36) or stroke (0.3% vs 0.4%; OR, 1.05; 95% CI, 0.44–2.49; P=0.91).

Neuraxial block was associated with less clinically important hypotension (39% vs 46%; OR, 0.90; 95% CI, 0.81–1.00; P=0.04). Postoperative epidural analgesia was not associated with the primary outcome (11.8% vs 6.2%; OR, 1.48; 95% CI, 0.89–2.48; P=0.13), death (1.3% vs 0.8%; OR, 0.84; 95% CI, 0.35–1.99; P=0.68), myocardial infarction (11.0% vs 5.7%; OR, 1.53; 95% CI, 0.90–2.61; P=0.11), stroke (0.4% vs 0.4%; OR, 0.65; 95% CI, 0.18–2.32; P=0.50) or clinically important hypotension (63% vs 36%; OR, 1.40; 95% CI, 0.95–2.09; P=0.09).

Conclusions: Neuraxial block and postoperative epidural analgesia were not associated with adverse cardiovascular outcomes among POISE-2 subjects.
Epidural Success Rates?

Dual-Epidural


50% ↓ incidence of:
- anastomotic insufficiency
- AF
- pulm. complications
- sepsis
**ENHANCED RECOVERY**

**GUIDELINES FOR POST OPERATIVE RECOVERY OF ALL SURGICAL PATIENTS**

**Post-Op Day**
- Sit out / up 6 hours post return to ward.
- Record observations 1-4 hourly as per Trust Protocol.
- Read patients operation notes.
- Check all wound sites and stoma on return.
- Allow drinks as able to tolerate plus Fortisips / Juice.

**Post-Op Day 1**
- Refer to physio if Laparotomy and OT if able.
- Sit out and mobilise as able daily.
- Discontinue IV fluids (if drinking) give protein drinks.
- Commence light diet if able to tolerate.
- Remove urinary catheter if no evidence of mobilise.
- Discontinue O2 if mobile.
- Commence stoma education if applicable.
- Check for passing flatus / bowel motion.

**Post-Op Day 2**
- Consider stopping PCEA / PCA commence regular oral analgesia.
- Liaise with Acute Pain Team.
- Remove urinary catheter (only if PCEA not in use).
- Continue with mobility and protein drinks.
- Continue with stoma education.
- Check for passing flatus / bowel motion.

**POST-Op Day 3**
- Continue as per Day 2.
- Continue with stoma education.
- Commence discharge planning.
- Consider teaching Diluglu injections prior to discharge planning if applicable.
- Consider patients home circumstances.

**Discharge Planning**
- Consider Diluglu 28 days post surgery for Ca reactions and continue wearing TEDS on discharge while having injections.
- District Nurse referral for all new stoma patients and APER / Proctoscopy patients for perineal wound checks.
- Request TTDs on ICE.
- Order any dressings / equipment.
- Discuss discharge transport with patient / family.

---

**Anesth Pain Med. 2014 May; 4(2):e12912.**

Published online 2014 March 8.

**Research Article**

**Analgesic Effects of Paracetamol and Morphine After Elective Laparotomy Surgeries**

Mahzad Alimian; Ali Reza Pournajafian; Ali Reza Kholdebarin; Mohammadreza Ghodraty; Faranak Rokhtabnak; Payman Yazdikasti

**Conclusions:** Paracetamol is not enough for postoperative pain relief in the first eight hour postoperatively, but it can reduce postoperative opiod need and is efficient enough for pain management as morphine after the first eight hours following surgery.
**Current issues in postoperative pain management**

Narinder Rawal

*Within multimodal analgesia strategies and ERAS pathways*

---

**Impact of including regional anaesthesia in enhanced recovery protocols: a scoping review**

D. I. McIsaac\(^1,2,3\), E. T. Cole\(^1\) and C. J. L. McCartney\(^1,2,3,\ast\)

Existing literature supports a positive impact of RA on ERP outcomes, which may be reflected in improved healthcare value. In order to justify the value of RA in ERP’s, a future focus on appropriate measures is needed to align research with widely accepted frameworks, such as the Triple Aim.

---

**The IHI Triple Aim**

*Population Health*  
*Experience of Care*  
*Per Capita Cost*
REGIONAL TECHNIQUES

TAP BLOCK
Continuous wound infiltration or epidural analgesia for pain prevention after hepato-pancreato-biliary surgery within an enhanced recovery program (POP-UP trial): study protocol for a randomized controlled trial

Timothy H. Mungroop, Ph.D., Denise P. Verbeek, Olivier R. Butch, Susan van Dieren, Thomas M. van Gulik, Tom M. Koster, Steve M. de Castro, Marc B. Godfried, Bram Thel, Manus W. Holmman, Philipp Link, and Marc G. Brulet
Thoracic Epidural analgesia versus Rectus Sheath Catheters for open midline incisions in major abdominal surgery within an enhanced recovery programme (TERSC): study protocol for a randomised controlled trial

Kate M Wilkinson, Anton Rudge, Sarah G Bearey, Steven Lane, Michael Scott, Anthony C Gordon and Gordon J Carson

SUMMARY

- Epidurals are probably no longer the “gold standard”
- Regional techniques combined with multimodal analgesia seem equally efficient
- Local audits should guide practice until RCTs provide sound evidence

Thank you