

Conclusions: A meta analysis of five studies³ showed no difference in time to tolerate normal diet, return of bowel function and post operative complications in ERP patients undergoing laparoscopic colorectal resections between those receiving IV morphine and those receiving epidural analgesia. Pain control in this study however was superior in the epidural group, but no distinction was made between left and right sided surgery. Our data shows that epidural analgesia does not result in significantly superior pain scores in ERP patients undergoing right sided laparoscopic colorectal surgery compared with PCA analgesia, whereas the opposite is true for anterior resections. This right /left sided difference has not been previously recorded.

References:

1. Kehlet et al. British Journal Surgery. 1999;227-230
2. Levy et al. Colorectal Disease. 2010;5-15

37
TRANSVERSUS ABDOMINIS PLANE BLOCK IN EARLY POSTOPERATIVE ANALGESIA AFTER CLASSICAL APPENDECTOMY - A PILOT STUDY

J. Azman, V. Frkovic, M. Horvat, V. Golubovic, Z. Zupan *Rijeka University Hospital, Rijeka, Croatia*

Background and aim: Transversus Abdominis Plane block (TAP) is a simple method for postoperative analgesia in patients who undergo operations that include incision of abdominal wall. It blocks sensory nerve supply of anterior abdominal wall. Aim of this study was to assess feasibility of TAP block for early postoperative analgesia following classical appendectomy.

Subjects and methods: Research included 19 patients undergoing urgent classical appendectomy. TAP block was performed after induction of general anesthesia (propofol 2–3mg/kg, sufentanil 0.3–0.6mcg/kg and rocuronium 0.6mg/kg) and orotracheal intubation. Anesthesia was maintained with sevofluran and sufentanil. TAP block was performed with 16G Tuohy needle using “double pop” loss of resistance technique and delivering 20ml of 0,375% l-bupivacaine.

VAS score was measured in rest and while patient was coughing 0, 12 and 24 hours after termination of general anesthesia.

Results: Mean VAS score in rest in PACU was 1.9, after 12 hours it was 2.3 and after 24 hours it was 3.0. Mean VAS score while coughing was 2.1 in PACU, 2.7 after 12 hours and 3.9 after 24 hours. Six patients required additional analgesia with i.v. diclofenac, 1mg/kg and there was no need for opioids.

Conclusion: Patients who received TAP block after classical appendectomy have low VAS scores on release from post anesthesia care unit and after 12 and 24 hours.

38
EFFICACY OF INTRAVENOUS FENTANIL IN ALLEVIATING PAIN DURING SPINAL NEEDLE INSERTION

R. Letica-Brnadic,¹ D. Bartolek,¹ K. Zdravcevic-Sakic,² E. Elabjer,³ N. Darabos,³ M. Merc⁴ ¹Anesthesiology and Intensive Care Unit, *University Hospital of Traumatology*, ²Anesthesiology and Intensive Care Unit, *General Hospital Sv. Duh*, ³Department of Surgery, ⁴Department of Internal Medicine, *University Hospital of Traumatology, Zagreb, Croatia*

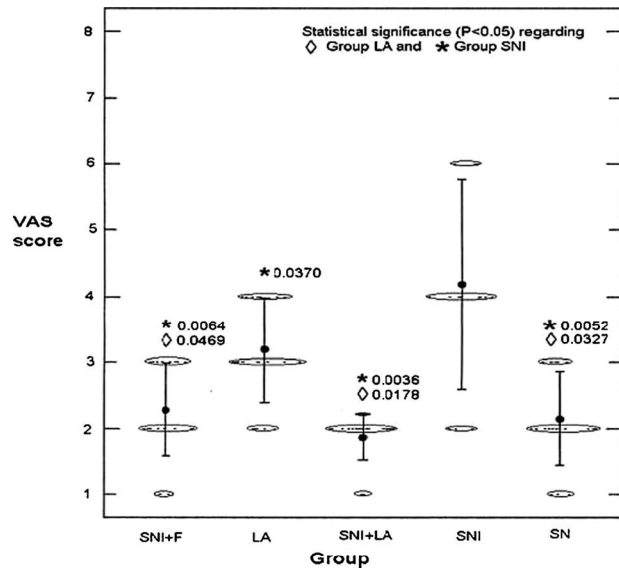
Background and aims: Spinal puncture is painful procedure which may cause patient refusal of spinal anesthesia in future surgery. It could be minimized with topical and infiltration local anesthetic or intravenous opioid before procedure. Objective made efficacy of intravenous fentanyl in alleviating pain during spinal needle insertion.

Methods: Prospective, randomized study included 88 adults (33–55 ages, ASA I/II), scheduled for lower leg surgery. Patients were divided in four equal study groups: 26G Quincke spinal needle with 20G introducer was inserted alone (SNI), three minutes after local anesthetic infiltration (2 ml of 2% lidocaine, 25G hypodermic needle)(SNI+LA) or intravenous fentanyl application (0.001 mgkg⁻¹)(SNI+F) and without local anesthetic, fentanyl and introducer (SN). Pain was assessed after spinal needle insertion and local anesthetic infiltration (LA) by VAS score. MAP, HR and SaO2 were recorded. Sedation was assessed by Ramsay score. Statistical analysis was performed by SPSS 11.0.

Results: Spinal puncture was less painful after intravenous fentanyl than local lidocaine infiltration (2.27+/-0.7 vs. 3.18+/-0.8)(P=0.0469). Although, the most acceptable pain score was assessed 3 min after local analgesia (1.86+/-0.35), pain associated with anesthetic infiltration did not justify its use

concerning the efficiency of intravenous fentanyl (Fig 1). Pain score was similar after finally puncture procedure: with introducer followed by fentanyl or LA, and without introducer, fentanyl and LA (2.27+/-0.7 vs. 1.86+/-0.35 and 2.14+/-0.7 vs. or)(P=0.0868).

Conclusions: Intravenous fentanyl (0.001 mgkg⁻¹) provides finally better pain score for spinal puncture (26G Quincke needle, 20G introducer) than local infiltration of 2% lidocaine. It conserves respiratory and circulatory stability and optimal sedation during surgery.



[Fig 1: VAS score after spinal puncture]

39
NEUROSENSORY EFFECTS OF LEVOBUPIVACAINE 0,5% WITH EPINEPHRINE, LEVOBUPIVACAINE 0,5% AND ROPIVACAINE 0,75% IN C5 DERMATOMES AFTER ULTRASOUND GUIDED INTERSCALENE BLOCK

N. Bosserez, J. Liesmons, L. Sermeus, G. Hans, M. Vercauteren *Anesthesiology, Antwerp University Hospital (UZ), Edegem, Belgium*

Background and aims: This study will investigate possible differences in effects on functioning of small fibers by means of a quantitative sensory examination. The aim is to identify the most optimal solution for single shot nerve blocks. This has the advantage of providing longer post-operative analgesia, resulting in less consumption of systemic analgesics.

Methods: For this prospective, randomized, double-blinded study a total of 45 patients was enrolled. Patients were scheduled to undergo arthroscopic surgery on the shoulder, with or without decompression technique.

After obtaining informed consent, patients were randomly divided in 3 groups of 15 persons in whom an US guided interscalene block (15ml with control of spread of local anesthetic around C5) respectively was performed with ropivacaine 0,75%, levobupivacaine 0,5% or levobupivacaine 0,5% with epinephrine 1/200 000.

A thermal quantitative sensorial examination was performed on the ipsilateral and contralateral dermatome C5. Detection thresholds for cold sensation, warm sensation, cold pain and heat pain were hereby measured. Thermal sensory testing was performed before infiltration, as well as 30 minutes, 6 hours, and 10 hours after infiltration. A final measurement was performed on the following morning (±24 hours after infiltration).

Results: Injection of each anesthetic solution resulted in a significant increase in thermal detection thresholds for all thermal sensations in the ipsilateral C5 dermatome, with more pronounced effects on painful sensations. These changes were observed from 30min and lasted up to 10 hours after injection, to reach pre-operative levels at the moment of the latest testing. No significant changes were observed in the contralateral dermatome. However, no significant changes were observed between the different anesthetic solutions, nor in time pattern nor in magnitude of effect on small fiber functioning.