Abstracts

B306 SUPERIOR TRUNK VS INTERSCALENE BRACHIAL PLEXUS BLOCK IN HUMERUS SURGERY: A RANDOMISED CONTROLLED TRIAL

C Sinha*, A Kumar, A SK, A Kumar. AllIMS, Patna, India
10.1136/rapm-2022-ESRA.380

Background and Aims Ultrasound guided interscalene block (ISB) is a commonly performed block for shoulder and humerus surgery. Though it provides excellent analgesia, it is associated with hemidiaphragmatic paralysis and dyspnoea. Superior trunk block (ST) has been described wherein the local anaesthetic is deposited around the superior trunk (formed by fusion of C5, C6 nerve roots). The aim of this study was to determine if ST block provides similar analgesic efficacy with lesser incidence of diaphragmatic paresis in patients undergoing proximal humerus surgeries.

Methods A total of 65 patients scheduled to undergo proximal or mid shaft humerus surgery were randomised into 2 groups. Patients in group I received Superior Trunk (ST) block while those in group II received ISB block. Both the groups received 15 ml of 0.5% bupivacaine. Diaphragmatic excursion was noted at baseline and after 30 minutes after the block. Postoperatively numerical rating scale (NRS) and requirement of opioids was documented.

Results The incidence of paresis was statistically less in ST group. No patient in ST group had complete paresis, while 11 patients in ISB group suffered the same. Partial paresis was seen in 62% patient in ISB and 19% in ST block. The percentage reduction of movement was higher in ISB group vs ST group. (0.72 +/- 0.091 vs 0.21 +/- 0.094). There was no difference in pain scores or the amount of opioid consumption in both groups.

Conclusions Superior trunk block provides similar analgesia comparable to the interscalene block for proximal/mid humerus surgery with preservation of diaphragmatic function.

B307 THE EFFECT OF ACETAMINOPHEN AND TOTAL KNEE ARTHROPLASTY ON ENDOGENOUS PLASMA ENDOCANNABINOID LEVELS

1S Clendenen*, 2R Mcclain, 2N Clendenen. 1Mayo Clinic Florida, Jacksonville, USA; 2UCHealth Anschutz. Medical Center, Aurora, USA
10.1136/rapm-2022-ESRA.381

Background and Aims Acute post-operative pain remains a significant challenge despite multi-modal analgesia approach and novel analgesic pathways may improve upon existing strategies. The endocannabinoid pathway may facilitate analgesia, but there is limited data regarding the impact of surgery and existing therapeutics on the endocannabinoid pathway during the perioperative time period. The specific aims of the study were to 1) measure the inter-individual variability of blood endocannabinoid levels in patients scheduled for elective total knee arthroplasty, 2) determine the effect of oral acetaminophen on blood endocannabinoid levels, and 3) determine the effect of surgery on blood endocannabinoid levels.

Methods The study protocol was approved by the Mayo Clinic IRB and patients provided informed consent. 23 adult patients undergoing elective total knee arthroplasty were enrolled in a prospective observational cohort study and provided venous blood samples at three time points (before surgery, before surgery after intravenous acetaminophen, and 24 hours postoperative). We measured endocannabinoid levels at each time point using a validated liquid chromatograph/mass spectrometry assay. We analyzed the data using a mixed methods linear regression model with the subject as a random effect and each time point as a fixed effect. We considered a p value < 0.05 significant. (Figure 1)

Results Two endocannabinoids differed significantly after exposure to acetaminophen (O-AEA and 14,15-EET-EA). Nine markers were different after exposure to surgery and perioperative management (O-AEA, LEA, DH-g-LEA, DEA, 2-AG, AEA, 14,15-EET-EA, OLA, PEA). Figure 1

Conclusions Acetaminophen and surgery have an impact on endogenous endocannabinoid blood levels, which presents a novel therapeutic target for perioperative analgesia.

B308 SELECT THE NEW ONQ SILVER SOAKER CATHETER VERSUS THE THORACIC EPIDURAL, THE ANCIENT GOLDEN STANDARD IN ERAS COLORECTAL SURGERY: A PROSPECTIVE SUPERIORITY COHORT STUDY

1CA Abusaris*, 2ST van Vugt, 3WA Bleeker, 4A Ott. 1Wilhelmina Hospital Assen/Department of Anesthesiology, Assen, Netherlands; 2Wilhelmina Hospital Assen/Department of General Surgery, Assen, Netherlands; 3Medical Diagnostics and Advice Certe/Department of Microbiology, Groningen, Netherlands
10.1136/rapm-2022-ESRA.382

Background and Aims The aim of this study was to compare ropivacaine-loaded catheters (infra-abdominal and preperitoneal) with the former golden standard of ERAS guidelines, the thoracic epidural anesthesia (TEA) in postoperative pain management after laparoscopic colorectal surgery.

Methods This prospective cohort study included 48 patients eligible for colorectal surgery between July 2018 and November 2019. 25 patients received a TEA with ropivacaine/sufentanil (cohort 1), 23 received an intraoperative i.v. lidocaine infusion and 2 catheters at the end of surgery (cohort 2). The Regional Ethics Committee Leeuwarden, The Netherlands gave ethical approval. The primary outcome was length of stay (LOS). Opioid consumption, NRS pain scores, time in the PACU and mobilization into a chair, catheter dislocation,