

## EP189 REVIEWING THE INDICATIONS FOR EPIDURAL ANALGESIA IN THE PARTURIENT WITH HIGH BMI

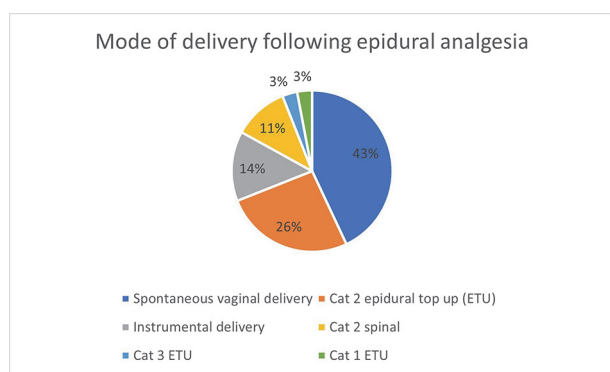
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**Background and Aims** Epidural analgesia is accepted as the gold standard for pain relief in labour. Maternal obesity is increasingly common and is known to be associated with morbidity. The American Society of Anesthesiologists suggests early placement of an epidural in women with obesity to reduce the need for general anaesthesia if an emergent procedure becomes necessary. We wanted to review the use of epidural analgesia and how commonly it was used for emergent caesarean section.

**Methods** We conducted a retrospective review from 2019 to 2022. This was done by searching the notes for women with a BMI >40 kg.m<sup>-2</sup>. The search identified age, BMI, use of epidural analgesia and type of anaesthetic.

**Results** We identified a total of 780 women with an average BMI of 42.7 kg.m<sup>-2</sup>. 166 women (21.2%) had an epidural placed for pain relief in labour. The mode of delivery following epidural analgesia is shown in the attached chart.



**Abstract EP189 Figure 1** Mode of delivery following epidural analgesia

**Conclusions** Our results show a low uptake of epidural analgesia in this group which is similar to the rate in the non-obese population. The most common mode of delivery following epidural analgesia was spontaneous vaginal delivery. Only 29% of epidurals were used for category 1 and 2 LSCS. This questions the recommendation about an early epidural in this group. We either need to advocate more strongly for epidurals to improve their usage in this group or stop giving this advice and accept that only in a small minority of cases will an epidural prevent use of a GA in an emergent procedure.

## EP190 ANALGESIC EFFICACY OF PARASACRAL SCIATIC AND PERICAPSULAR NERVE BLOCK VS PER CAPSULAR NERVE BLOCK FOR TOTAL HIP REPLACEMENT SURGERIES: A RANDOMISED CONTROLLED TRIAL

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**Background and Aims** Total hip replacement (THA) is recommended with multimodal analgesia, with peripheral nerve blockade being popular due to its opioid sparing properties1–4. PENG (Pericapsular Nerve Group) block, which has shown analgesic efficacy in THA, preserves sensory supply to the posterior hip capsule5–8. this study compares the analgesic efficacy of PENG block with PENG and PS sciatic nerve block, which blocks the sensory supply to the posterior capsule7,9,10

**Methods** After informed written consent, 30 ASA (American Society of Anaesthesiologist's) classification I and II patients scheduled for elective THA were randomised into two groups A and B. After induction of general anaesthesia, Group A received US guided PENG block whereas Group B received combined PENG and PS sciatic nerve block. Post-operatively patients were administered intravenous(IV) fentanyl via Patient Controlled Analgesia(PCA) pump. Analgesia was compared to PCA fentanyl consumption at 24 and 48 hours, as well as the numerical rating scale (NRS) score at different time intervals

**Results** Group B had reduced 24 hour (88.3±2mcg vs 69.3±28.5mcg) and 48 hour (158.7±26.4 mcg vs 118.1±24.2 mcg) IV fentanyl intake. In groups A and B, the time for rescue analgesia was 124.51 minutes (min) and 171.2 minutes (min), respectively. Patients in both groups were mobilised 24 hours after surgery, with a median worst NRS score of 4.

**Conclusions** Combined PENG and PS sciatic nerve block reduces perioperative fentanyl consumption and pain scores in THA patients compared to PENG block.

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## EP191 EFFICACY OF DIFFERENT APPROACHES OF QUADRATUS LUMBORUM BLOCK FOR POSTOPERATIVE ANALGESIA AFTER CESAREAN DELIVERY: A BAYESIAN NETWORK META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

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**Background and Aims** Various approaches to quadratus lumborum block (QLB) have been found to be an effective analgesic modality after cesarean delivery (CD). However, the evidence for the superiority of any individual approach is still elusive. Therefore, we conducted this network meta-analysis to compare and rank the different injection sites for QLB for pain-related outcomes after CD.

**Methods** PubMed, EMBASE, SCOPUS, and the Cochrane Central Registers of Controlled Trials (CENTRAL) were searched for randomized controlled trials evaluating the role of any approach of QLB with placebo/no block for post-CD pain. The primary outcome was parenteral consumption of morphine milligram equivalents in 24 postoperative hours. The secondary endpoints were early pain scores (4-6 hours), late pain scores (24 hours), adverse effects, and block-related complications. We used surface under cumulative ranking (SUCRA) probabilities to order approaches. The analysis was performed using Bayesian statistics (random-effects model).

**Results** Thirteen trials enrolling 890 patients were included. The SUCRA probability for parenteral morphine equivalent

consumption 24 hours was highest (87%) for the lateral approach, followed by the posterior and anterior approaches. The probability of reducing pain scores at all intervals was highest with the anterior approach. The anterior approach also ranked high for PONV reduction, the only consistent reported side effect.

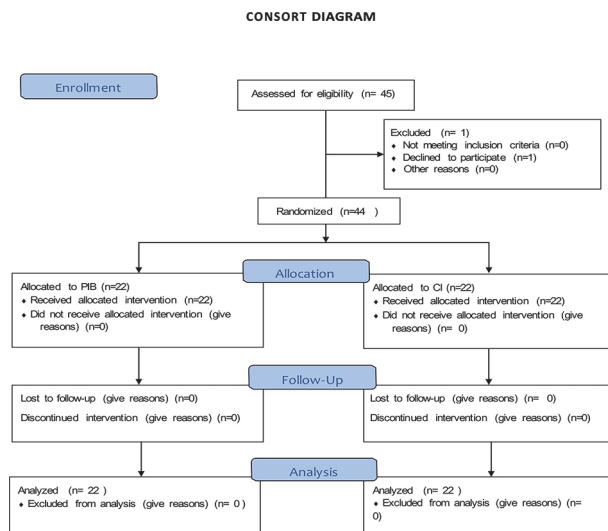
**Conclusions** The anterior approach QLB had a superior probability for most patient-centric outcomes for patients undergoing CD. The findings should be confirmed through large RCTs.

**EP192 TO COMPARE THE EFFECTS OF 0.2% ROPIVACAINE CONTINUOUS INFUSION (CI) VERSUS PROGRAMMED INTERMITTENT BOLUS (PIB) ON POSTOPERATIVE ANALGESIA WITH ADDUCTOR CANAL BLOCK, IN PATIENTS UNDERGOING UNILATERAL KNEE ARTHROPLASTY- A RANDOMIZED CONTROL TRIAL**

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**Background and Aims** Multimodal regimens, are the mainstay of postoperative analgesia. This study compares analgesic efficacy of, Programmed Intermittent Bolus (PIB) and Continuous Infusion (CI) pumps, ultrasound guided Adductor Canal Block (ACB) with catheter, for unilateral knee arthroplasty.



**Abstract EP192 Figure 1** Consort diagram

**Methods** Ethical and Clinical Trial Registry approved, included patients were randomized into two groups, intraoperatively, either general, or spinal anaesthesia, pericapsular infiltration, postoperatively, ACB, received 0.2% Ropivacaine. Group-I, PIB pump 10 milliliters every 3 hours, Group-II, 6 milliliters/hour as CI. Additionally, both groups received Patient Controlled Analgesia (PCA) with 5 milliliters boluses and 30 minutes lockout interval. The Numerical Rating scale (NRS) score, plasma concentration of 0.2% Ropivacaine, adjunct analgesics, quadricep strength by straight leg rising (SLRT) test, Medical Research Council (MRC) scale for motor power,

monitored at 0, 1, 4, 8, 24, 48, 72 hours, and Likert scale for patient satisfaction, measured at 72 hours. Sample size calculation, a difference in the NRS of two points to be clinically meaningful. Power of 0.80 and Standard Deviation(SD) of 2 points, it took at least seventeen patients from each group to detect a 2-point difference in NRS pain levels.

**Results** PIB group, patients experienced better analgesia only in the first 24 hours and motor power, in the first and fourth hour after recovery. Ropivacaine plasma concentration, at regular intervals were independent to the pain scores with movement and rest. Rescue analgesia was inconclusive in both groups.

**Conclusions** PIB option, proved better analgesia in the post operative period.

**ePoster session 6 – Station 3**

**EP193 RISK FACTORS OF HYPOTENSION DURING CESAREAN SECTION WITH SPINAL ANESTHESIA IN COVID-19 PARTURIENTS: A RETROSPECTIVE STUDY COMPARING WITH NON-COVID-19 PREGNANT WOMEN**

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**Background and Aims** The incidence of hypotension in pregnant women with COVID-19 undergoing regional anesthesia remains a controversial. The aim of this study is to investigate the incidence of hypotension during spinal anesthesia in pregnant women infected with COVID-19, as well as to identify associated risk factors.

**Methods** This retrospective study compared COVID-19-positive parturients who underwent cesarean section with spinal anesthesia between January 2021 and June 2022 (group COVID-19) with a control group of patients who underwent the same procedure between January 2017 and December 2021 and were statistically matched for age, weight, and height with the group COVID-19.

**Results** The COVID-19 group received low-dose bupivacaine anesthesia and showed comparable levels of anesthesia and blood pressure reduction to the control group. However, they required more colloid usage. A positive correlation was noted in the COVID-19 group between heart rate and hospital stay duration ( $p=0.000$ , Spearman's  $\rho=0.422$ ). Further analysis based on initial heart rate revealed that group H (100 or higher) had lower Apgar scores at 1 minute, longer hospital stays, and more severe COVID-19 symptoms. Moreover, in group H, there was a positive correlation between heart rate and the lowest systolic blood pressure after spinal anesthesia ( $p=0.012$ , Spearman's  $\rho=0.528$ ).

**Conclusions** COVID-19 pregnant women have a higher risk of hypotension during cesarean section under spinal anesthesia compared to non-COVID-19. Given the close association between preoperative heart rate and the extent of hypotension in COVID-19 pregnant women undergoing spinal anesthesia, vigilant monitoring of vital sign by anesthesiologists is crucial during the perioperative period.