

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.

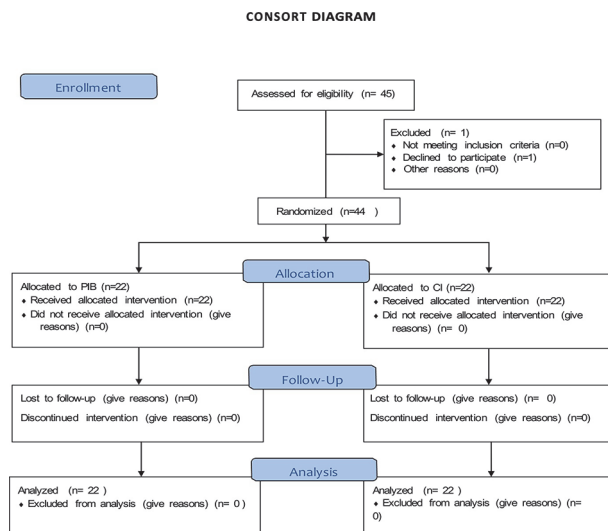
Conclusions The anterior approach QLB had a superior probability for most patient-centric outcomes for patients undergoing CD. The findings should be confirmed through large RCTs.

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.

Abstract EP193 Table 1 Baseline characteristics of group COVID-19 and group control

Table 1. Baseline characteristics of group COVID-19 and group control

	COVID-19 (n=74)	Control (n=63)
Age (years)	34 [32,37.3]	34 [31,36]
BMI (kg/m ²)	25.9 [24.8,28.1]	26.7 [25.2,28.8]
Gestational weeks	38.3 ± 1.4	38.1 ± 1.3
Urgency		
elective	56	50
emergency	18	13
Site of puncture		
L 4-5	72	59
L 3-4	2	4
Approach of puncture		
median	70	60
paramedian	4	3
Operation time (min)	64 [53.8,76]	61 [55,71]
Operation-discharge time (days)	6 [4,7.3] *	4 [4,4]
Block-incision time (min)	15 [12,18]	15 [10,17]
Apgar score 1min	9 [8,9]	9 [8,9]
5min	9 [9,10]	9 [9,10]
newborn bodyweight (kg)	3.2 ± 0.4	3.3 ± 0.4

Values are presented as number, mean ± SD or the median [Q1,Q3]. * P <0.05.

Abstract EP193 Table 2 Perioperative anesthetic variables

Table 2. Perioperative anesthetic variables

	COVID-19 (n=74)	Control (n=63)
Bupivacaine dose (mg)	7 [7,8] *	8 [7.5,8]
Sensory block height	T6 [T6, T10]	T6 [T6, T8]
Base SpO ₂ (%)	100 [99,100] *	99 [98,100]
Base Heart Rate (bpm)	89 [78.8,102.3] *	79 [73,94]
Base mean blood pressure (mmHg)	95.5 [88.6,108]	100 [91,108]
Base systolic blood pressure (mmHg)	121 [112,130] *	129 [123,141]
Lowest systolic blood pressure after spinal anesthesia (mmHg)	88 [82,96.5]	87 [81,100]
Total phenylephrine dose (mg)	0.3 [0.1,0.5]	0.2 [0,0.4]
Total ephedrine dose (mg)	0 [0,5]	0 [0,5]
Total infused crystalloid (mL)	500 [500,500]	500 [400,800]
Total infused colloid (mL)	500 [500,1000]	500 [500,500] *

Values are presented as the median [Q1,Q3]. * P <0.05.

Abstract EP193 Table 3 Subgroup analysis of group COVID-19 based on baseline heart rate

Table 3. Subgroup analysis of group COVID-19 based on baseline heart rate

	Heart Rate ≥ 100 (n=22)	Heart Rate < 100 (n=52)
Postop discharge (days)	7 [5,9]*	5 [4,6.8]
Apgar score 1min	8 [8,9]*	9 [8,9]
Apgar score 5min	9 [9,9]	9 [9,10]
newborn bodyweight (kg)	3.2 ± 0.4	3.1 ± 0.4
Worsening of COVID-19 symptoms after surgery n (%)	7 (32)*	7 (14)

Values are presented as number, mean ± SD or the median [Q1,Q3]. * P <0.05.

IRBapprovalnotice

EP194

COMPARISON BETWEEN THE MEDIAL AND LATERAL APPROACHES OF ULTRASOUND-GUIDED COSTOCLAVICULAR BRACHIAL PLEXUS BLOCK FOR UPPER LIMB SURGERIES- A RANDOMISED CONTROL TRIAL

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Background and Aims The aim of our study is to compare medial and lateral approaches of the costoclavicular BPB which became procedure of choice for upper limb anaesthesia. We hypothesized costoclavicular block through medial approach would result in shorter performance time owing to favourable anatomy.

Methods After IEC approval, 60 patients participated, 30 in each group. In group M, needle was advanced in a medial to lateral direction, whereas in Group L, needle was advanced in lateral to medial direction. 20ml of 0.5% bupivacaine were used in both groups. The primary outcome assessed was performance time. The secondary outcomes preliminarily analysed were Imaging time, Needling time, Total Anaesthesia time, Anaesthesia success, Performer difficulty score. Further subgroup analysis concerning other outcomes are ongoing. As two patients were switched over to Group L due to unfavourable sono-anatomy, we ran statistical analysis by modified Intention to treat analysis and as per protocol analysis. We summarise results from mITT analysis.

Results The mean±SD for performance time (mins) were 11.9 ±3.8 in Group M and 9.4±4.1 in Group L with difference of mean (95%CI) of 2.4 (0.3 to 4.5) with p-value <0.05. Similarly, imaging, needling, total anaesthesia time were higher in Group M. Performer difficulty score (Grade 2&3) [66.67% vs 48.2%,p-value- 0.032] was also higher in Group M compared to Group L.

Abstract EP194 Table 1 Showing the baseline characteristics between the two study groups

	GROUP M (n=30)	GROUP L (n=29)	p-value
AGE (years)	34.8 ± 11.4	34.2 ± 11.9	0.829
SEX			0.731
M	24 (80%)	25 (86.2%)	
F	6 (20%)	4 (13.7%)	
ASA			0.731
1	24 (80%)	25 (86.2%)	
2	6 (20%)	4 (13.7%)	
WEIGHT (kg)	66.8 ± 10.6	63.2 ± 7.5	0.140
HEIGHT (cm)	167.1 ± 6.5	167.8 ± 5.6	0.634
BMI	23.9 ± 3.5	22.4 ± 2.1	0.050
BASELINE VITALS			
SBP (mmHg)	126.8 ± 11.8	126.7 ± 12.8	0.989
DBP (mmHg)	79.3 ± 8.5	80.8 ± 6.7	0.440
PR (bpm)	80.1 ± 12.9	83.7 ± 14.1	0.313
SPO ₂ (%)	98.9 ± 1.2	98.9 ± 1.0	0.996
DEPTH AT MIDCLAVICULOACROMIAL POINT (cm)	3.65 ± 1.1	3.48 ± 0.8	0.501