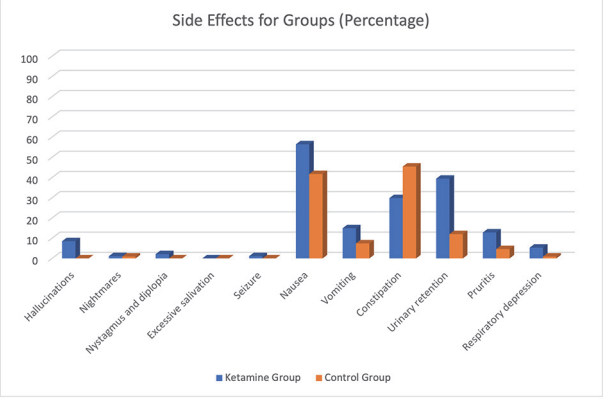
EP161 FEASIBILITY OF POSTOPERATIVE KETAMINE INFUSION IN GENERAL HOSPITAL WARDS WITHOUT INTENSE MONITORING IN CHRONIC PAIN PATIENTS: A RETROSPECTIVE COHORT STUDY

Tural Alekberli*, Shiva Khandadashpoor, Ashok Kumar, Zeev Friedman, Naveed Siddiqui. *Department of Anesthesia and Pain Management, University of Toronto, Mount Sinai Hospital, Toronto, Canada*

10.1136/rapm-2023-ESRA.222

Background and Aims Chronic pain is prevalent and poses challenges in perioperative management. Opioid-dependent patients often require higher opioid doses and experience uncontrolled postoperative pain. Ketamine, a non-competitive NMDA-receptor-antagonist, has shown promise in reducing postoperative opioid-consumption and pain intensity. This study aims to evaluate ketamine-infusion safety and side-effects in postoperative wards and its impact on monitoring protocols, as well as its potential to reduce opioid-use in chronic opioid-dependent patients.



Abstract EP161 Figure 1 Side Effects for Groups

Abstract EP161 Table 1 Patient characteristics, opioid use, adverse effects, and hospital stay comparison between two groups

	Ketamine Group	Control Group	p-value
Patient characteristics			
n	94	108	
Age	54.0 [42.0, 59.75]	57.0 [49.0, 64.0]	**0.004**
Male sex	45 (47.9)	46 (42.6)	0.542
Opioid Use			
24-hour preoperative opioid use	105.0 [30.0, 400.0]	113.5 [60.0, 210.0]	0.850
Intraoperative opioid use	115.0 [85.0, 167.0]	91.25 [44.5, 125.25]	**<0.001**
First 24-hour postoperative opioid use	249.75 [105.75, 569.0]	236.95 [121.5, 472.0]	0.816
Second 24-hour postoperative opioid use	211.0 [82.0, 531.0]	160.0 [69.5, 285.65]	**0.033**
Adverse effects & Hospital stay			
Hallucinations	8 (8.5)	0 (0)	**0.006**
Nightmares	1 (1.1)	1 (0.9)	1.000
Nystagmus and diplopia	2 (2.1)	0 (0)	0.417
Excessive salivation	0 (0)	0 (0)	NA
Seizure	1 (1.1)	0 (0)	0.944
Nausea	53 (56.4)	45 (41.7)	**0.052**
Vomiting	14 (14.9)	8 (7.4)	0.140
Constipation	28 (29.8)	49 (45.4)	**0.033**
Urinary retention	37 (39.4)	13 (12.0)	**<0.001**
Pruritis	12 (12.8)	5 (4.6)	0.068
Respiratory depression	5 (5.3)	1 (0.9)	0.156
Length of hospital stay (hours)	174.55 [107.2, 325.25]	116.66 [69.91, 193.21]	**<0.001**

Data is reported as number (percentage) or median [interquartile range].

Methods In this retrospective chart-review we compared: patients who received intraoperative and postoperative ketamine-infusion(Ketamine-Group) and patients who did not (Control-Group). Outcomes included severity of ketamine-related adverse-effects, opioid-related side-effects measured via validated 11 item scale, and length of hospital stay.

Results This study included 202patients, ketamine-group(94-patients) and control-group(108-patients). No ketamine-related severe side-effects were observed in any group. Mild to moderate ketamine-related side-effects were reported in both groups, with mild-hallucinations being more frequent in the ketamine-group($p=0.006$). Mild Nausea($P=0.052$) and urinary-retention($p<0.001$) was observed more frequently in ketamine-group. Constipation was observed more frequently in control-group($p=0.033$). Ketamine-group had significantly higher median intraoperative opioid- use($p<0.001$), and second 24-hour postoperative opioid-use($p=0.033$). Median length of hospital stay in the ketamine-group was 174.55-hours compared to 116.66-hours in control-group($p<0.001$) (table-1, figure-1).

Conclusions This study demonstrated the feasibility of ketamine-infusion for postoperative opioid consumption in patients with chronic pain without 1:1 monitoring in the ICU or step-down units. The use of ketamine was not associated with any major adverse effects requiring intense resource utilization. There was no direct association between ketamine-related side-effect and increased length of hospital stay. However, the long-term effects of ketamine-infusion on postoperative pain remain to be evaluated.

EP162 THORACOSCOPIC INTERCOSTAL NERVE BLOCK WITH COCKTAIL ANALGESICS FOR PAIN CONTROL AFTER VIDEO-ASSISTED THORACOSCOPIC SURGERY: A PROSPECTIVE COHORT STUDY

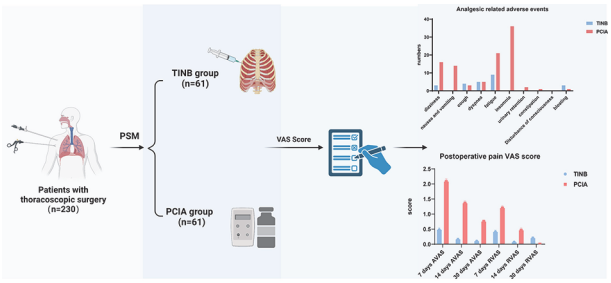
Yingxian Dong*, Jue Li. *Lung cancer center, West China Hospital, Chengdu, Sichuan, China*

10.1136/rapm-2023-ESRA.223

Background and Aims The purpose of this study was to evaluate whether using a cocktail of intercostal nerve blocks during thoracoscopic surgery results in better clinical outcomes than using patient-controlled analgesia.

Methods Patients who underwent video-assisted thoracoscopic surgery (VATS) from the same medical group in West China Hospital of Sichuan University during 2021, June to 2022, June were enrolled. The groups were divided into two subgroups based on their analgesic program, which were thoracoscopic intercostal nerve block group (TINB group) and patient-controlled intravenous analgesia group (PCIA group). After propensity score matching (PSM), We assessed the patients' pain at different time points after surgery using the visual analogue scale (VAS) and recorded any analgesic related adverse events (ARAEs).

Results The difference of resting VAS (RVAS) and active VAS (AVAS) at different stage during hospitalization was only related to the change of period, and the two groups showed no significant differences in RVAS or AVAS during hospitalization. However, the rates of dizziness (4.92% vs 26.23%, $p < 0.05$), nausea and vomiting (0 vs 22.95%, $p < 0.05$), fatigue (4.75% vs 34.43%, $p < 0.05$), and insomnia (0 vs 59.02%, $p < 0.05$) in TINB group were significantly lower than that in PICA group. Besides, AVAS and RVAS at 7, 14, and 30 days after discharge in TINB group were both significantly lower than that in PICA group ($p < 0.05$, $p < 0.05$).



TINB, Thoracoscopic Intercostal Nerve Block; PICA, Patient-Controlled Intravenous Analgesia; AVAS, Active visual analogue scale; RVAS, Resting visual analogue scale.

Abstract EP162 Figure 1 central picture of TINBs

Conclusions Based on this single-center analysis, cocktail analgesia TINB provided better analgesia after discharge and reduced the incidence of ARAEs in patients undergoing VATS.

ePoster session 5 – Station 4

EP163 ULTRASOUND ESTIMATES OF EPIDURAL DEPTH IN PARAMEDIAN SAGITTAL OBLIQUE AND TRANSVERSE MEDIAN PLANES: THE CORRELATION BETWEEN ESTIMATED AND ACTUAL EPIDURAL DEPTH IN CHILDREN WITH SCOLIOSIS

[1]Hye Jin Kim*, [2]Su Youn Choi, [3]Young-Eun Joe, [3]Yong Seon Choi. *[1]Seoul, Korea; [2]Department of Anesthesiology and Pain Medicine, Yonsei University College of Medicine, Yongin Severance Hospital, Yongin-si, Korea; [3]Department of Anesthesiology and Pain Medicine, Yonsei University College of Medicine, Severance Hospital, Seoul, Korea*

10.1136/rapm-2023-ESRA.224

Background and Aims There is insufficient evidence on which ultrasound (US) view can predict epidural depth for midline epidural procedure in children with scoliosis. We hypothesized that the US estimated distance from the skin to the epidural space (US-ED) in the paramedian sagittal oblique (PSO) plane is comparable with the US-ED in the TM plane to predict actual epidural depth.

Methods The institutional review board of the Severance Hospital has been granted (IRB no. 4-2021-0266). 55 patients being placed in a flexed left-sided position, US-EDs was measured in the bilateral PSO and TM plane at the L2/3 interspace. During the midline epidural puncture using the loss-of-resistance technique to air, the needle depth from the skin to the epidural space was sought (table 1). Correlation between the US-EDs and the needle depth was investigated with Pearson's correlation coefficient (PCC), Concordance Correlation Coefficient (CCC). The graded visibility of posterior dura complex was compared.

Results PCC and CCC between the US-EDs and the needle depth were excellent in all planes. Amongst all US-EDs, the longer value of the US-ED in the PSO taken from both sides showed highest PCC and CCC value (table 2). The 'good' visibility is significantly higher in the PSO view than in the TM view (72.7% vs. 38.2%, P-value <0.001).

Conclusions PSO and TM planes are both interchangeably feasible to predict the needle depth in pediatric patients with lumbar scoliosis. However, the longer of the two US-EDs in the bilateral PSO view is more reliable than US-ED in the TM view with better visualization.

Abstract EP163 Table 1 Patient characteristics and data

Table 1. Patient characteristics and data

	Participants (n=55)
Age (years)	10 (4–14)
Height (cm)	128.8 ± 16.0
Weight (kg)	26.0 [20.9–37.7]
Body mass index (kg m^{-2})	16.8 ± 3.4
Diagnosis	
Cerebral palsy	47 (85.5%)
Others	8 (14.5%)
Scoliosis	
Cobb angle (°)	10.7 [10.3–12.3]
Moderate/severe scoliosis	2 (3.6%)/0
US-EDs (cm)	
US-ED in the left PSO view	2.6 [2.2–3.2]
US-ED in the right PSO view	2.6 ± 0.6
US-ED$_{max}$ in the PSO view	2.7 [2.3–3.2]
US-ED$_{min}$ in the PSO view	2.6 ± 0.7
US-ED in the TM view	2.7 ± 0.6
Needle depth (cm)	2.9 [2.4–3.4]

Data are presented as mean (range) for age, mean ± SD, median [IQR], or number of patients (%).
PSO, paramedian sagittal oblique; TM, transverse median; US-ED, US estimated distance from the skin to the epidural space; US-ED$_{max}$, the maximal value of US-ED; US-ED$_{min}$, the minimal value of US-ED

Abstract EP163 Table 2 Correlation between US-EDs and the needle depth

Table 2. Correlation between US-EDs and the needle depth

Ultrasound plane	Pearson's correlation coefficient	Concordance correlation coefficient (95% CI)	Mean difference, cm (95% limits of agreement)
US-ED in the left PSO view	0.958	0.936 (0.895 to 0.961)	-0.156 (-0.566 to 0.253)
US-ED in the right PSO view	0.943	0.886 (0.823 to 0.928)	-0.228 (-0.712 to 0.255)
US-ED$_{max}$ in the PSO view	0.964	0.952 (0.920 to 0.971)	-0.110 (-0.488 to 0.268)
US-ED$_{min}$ in the PSO view	0.946	0.873 (0.806 to 0.918)	-0.275 (-0.739 to 0.190)
US-ED in the TM view	0.930	0.892 (0.829 to 0.933	-0.183 (-0.709 to 0.344)

US-ED, ultrasound estimated distance from the skin to the epidural space; CI, confidence interval; PSO, paramedian sagittal oblique; US-ED$_{max}$, the maximal value of US-ED; US-ED$_{min}$, the minimal value of US-ED; TM, transverse median

Ethics Committee Approval

EP164 EVALUATING THE EFFICACY AND PERFORMANCE PROPERTIES OF COSTOCLAVICULAR APPROACHES VERSUS TRADITIONAL LATERAL SAGITTAL TECHNIQUE IN INFRACLAVICULAR BRACHIAL PLEXUS BLOCK: A RANDOMIZED CONTROLLED TRIAL

[1]Emre Sertac Bingul*, [2]Mert Canbaz, [3]Emine Aysu Salviz, [4]Emre Senturk, [1]Ebru Emre Demirel, [1]Zerrin Sungur, [1]Meltem Savran Karadeniz. *[1]Dept of Anaesthesiology, Istanbul University Istanbul Faculty of Medicine, Istanbul, Turkey; [2]Dept of Anaesthesiology, Istanbul University Istanbul Faculty of Medicine, Istanbul , Turkey; [3]Dept of Anaesthesiology, Washington University School of Medicine, St. Louis, Missouri, USA; [4]Dept of Anaesthesiology, Beylikduzu State Hospital, Istanbul, Turkey*

10.1136/rapm-2023-ESRA.225

Background and Aims Blocking brachial plexus with an injection in the costoclavicular fossa has been defined recently. It is aimed to compare infraclavicular techniques including lateral and medial approach costoclavicular, and traditional lateral sagittal approach. A quicker sensory block onset time was hypothesized for 'lateral' costoclavicular approach.

Methods After obtaining ethical approval, lateral sagittal (LSB), costoclavicular medial (CMB) or costoclavicular lateral (CLB) blocks were performed according to randomization. Single local anaesthetic injections were made posterior to the subclavian artery in LSB group, and to the central of cord cluster in costoclavicular block groups. Depending on the trajectory of needle, costoclavicular blocks are named medial (CMB) or lateral (CLB). Sensory and motor block onset times, block