



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

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

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