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LETTER TO THE EDITOR

Enhancing Minimally Invasive Thoracic Surgery: Efficacy of Serratus Posterior Superior Intercostal Plane Block in VATS Procedures

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Dear Editor,

Video-assisted thoracic surgery (VATS), known for its minimally invasive nature, offers significant benefits such as reduced postoperative pain and fast recovery. Recent progress in regional anaesthesia, like the Serratus Posterior Superior Intercostal Plane Block (SPSIPB), has improved "analgesia" for VATS.[1,2] In SPSIPB, local anesthetic spreads to superficial and deep planes of the erector spinae muscles and intercostal muscle from T1 to T7, spreading to the anterior axillary line,[2] which covers the surgical area. This letter details the execution of SPSIPB in a 64-year-old high-risk patient undergoing VATS for pleural drainage whose surgery was completed without general anaesthesia and orotracheal intubation.

Prior to surgery, the patient was positioned lateral decubitus and sedated with 2 mg of midazolam IV. A linear ultrasound probe was placed near the medial border of the scapula where a 22-G, 50-mm block needle (Stimuplex® Ultra 360®, B-Braun, Germany) was advanced in between the serratus posterior superior muscle and the intercostal muscles at the level of the third thoracic vertebra, and 30 ml of 0.25% bupivacaine was administered (Fig. 1). After 20 minutes and following sterile draping, the surgery commenced and lasted approximately 45 minutes. Sedation was maintained with an additional 3 mg of midazolam IV, 50 micrograms of fentanyl IV, and 70 mg of propofol IV, and the procedure was completed successfully with the patient reporting no pain without any haemodynamic instability.

Our findings suggest that SPSIPB can be considered an alternative to general anesthesia for minor VATS, enhancing patient safety and comfort.[3] Despite being promising, further

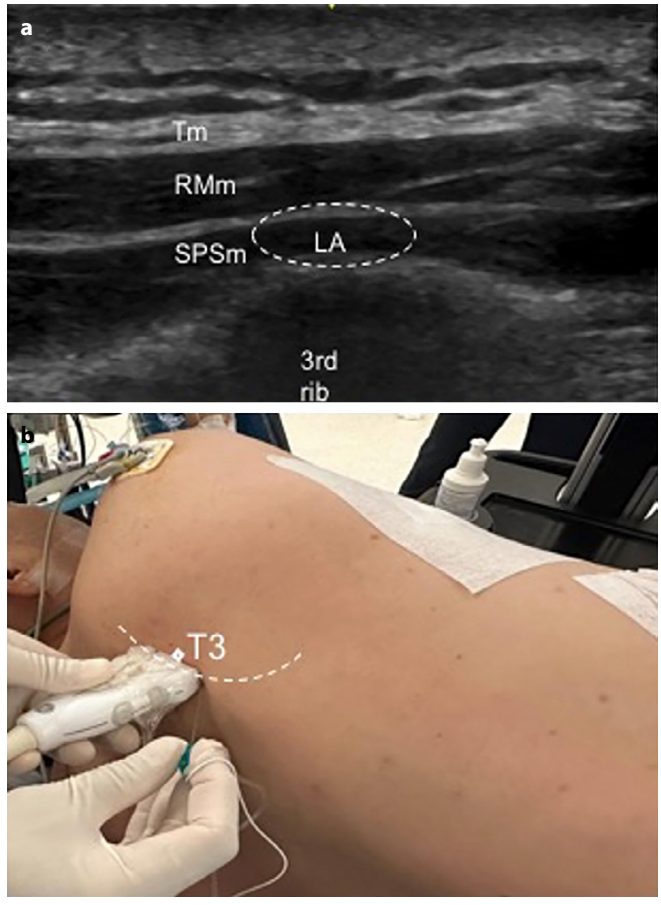

Figure 1. (a) Sonoanatomy and spread of LA during SPSIP. **(b)** Patient, probe, and needle position during SPSIP.

LA: Local anesthetic; Tm: Trapezius muscle; RMm: Rhomboid majör muscle; SPSm: Serratus posterior muscle; SPSIP: Serratus posterior superior intercostal plane.

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comprehensive large-scale studies are necessary to validate SPSIPB's efficacy. Our experience indicates that SPSIPB could be an advantageous technique for thoracic surgery, deserving further investigation in larger patient cohorts.

This version condenses the details about the specific case and general findings, focusing on the implications and potential of SPSIPB in minor VATS without losing the essence of the original message.

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