

ERECTOR SPINAE PLANE BLOCK FOR PLEURITIC CHEST PAIN: A CASE REPORT

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Introduction

The erector spinae plane (ESP) block is the block for the future. Instead of performing intercostal blocks, transverse abdominal plane (TAP) blocks, or serratus anterior blocks for truncal analgesia, the ESP block can and should be your one block shop.

Case

We present our case with a 48-year-old male who presented for a routine cystoscopy and one day later endorsed right sided flank and pleuritic chest pain secondary to a right-sided pleural effusion. With trial and failure of analgesics, NSAIDs, and opioids, we turned to the ESP block. Using the lower border of scapula as a landmark for T7, the T7 spinous process was located. After sterile prep and gloves were donned, an ultrasound probe was used to visualize the T7 transverse process. A 22G 80mm Pajunk needle was advanced in-plane and 30cc of Ropivacaine 0.25% with Decadron 5mg PF was administered into the ESP. Aspiration q5ccs was negative for heme/csf/air. Local anesthetic spread was visualized on ultrasound. Meaningful patient verbal response maintained throughout procedure. Block needle tip identified by ultrasound throughout the procedure. After a couple of hours, the patient went from a pain rating of 10/10 down to a 3/10, with full resolution of the pain by the next morning.



1 million patients per year experience
pleuritic chest pain

Gold Standard treatment is currently NSAIDs

Erector Spinae Plane (ESP) Blocks should be the
new one block shop

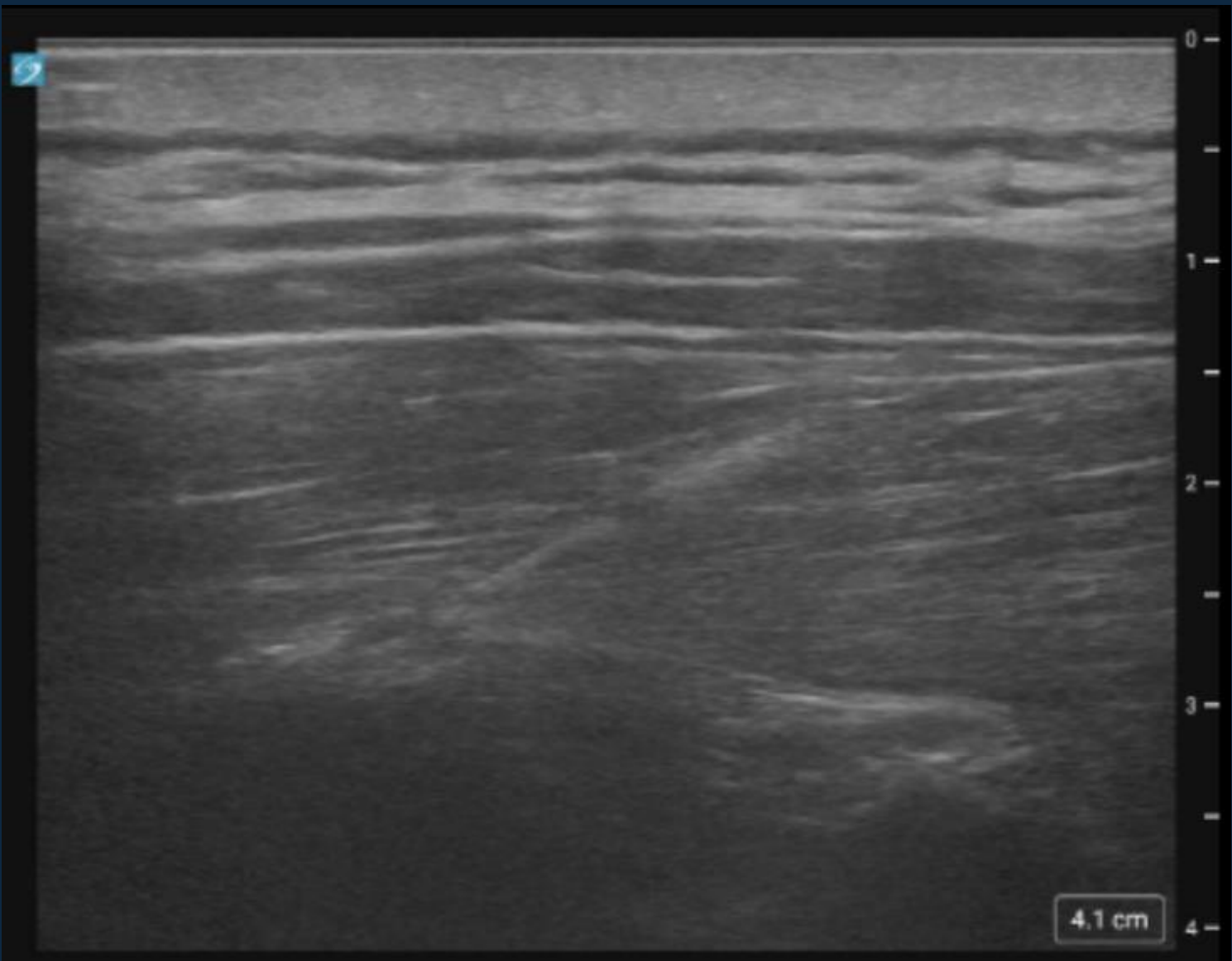


Figure 1. Pre-injectate In-Plane View



Figure 2. Post-injectate anesthetic spread In-Plane View



Discussion

Although, not with a fully understood mechanism of action, the ESP block manages to provide truncal analgesia in a trustworthy fashion. Furthering the utility of the ESP block, there should be further investigations comparing blocks that provide analgesia in a similar pattern such as intercostal, TAP, serratus anterior, PECS, and paravertebral blocks. Nevertheless, with its ease of use, the ESP block is already a viable option to treat an array of truncal pain in a safe and effective manner.

Moving forward, it would be beneficial to conduct a study that evaluates pain control of the ESP block for patients who are experiencing pleuritic chest pain in comparison to treatment with the current gold standard, NSAIDs, along with the risk profiles.

References

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