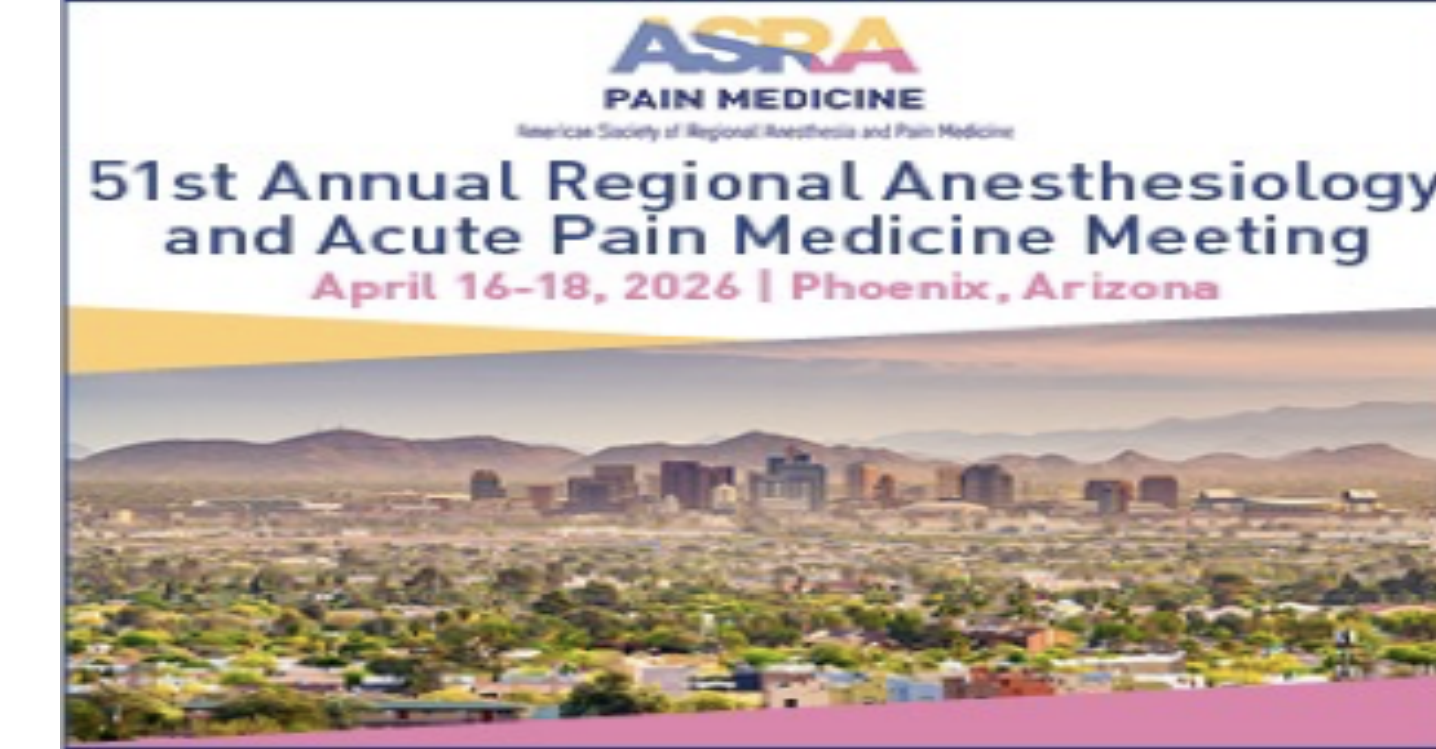


Opioid-Sparing Pain Control in Acute Pancreatitis Using a Single-Shot Erector Spinae Plane Block

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Background

- Gastrointestinal diseases account for over \$119 billion dollars in annual healthcare costs in the United States (U.S.).
- Acute pancreatitis is one of the leading causes of gastrointestinal related inpatient admissions in the US, accounting for over 300,000 annual admissions.
- Acute pancreatitis is commonly treated with opioid analgesia, which carries risks of adverse effects and prolonged hospitalization.
- Regional anesthesia techniques such as the Erector Spinae Plane Block (ESPB) offer opioid-sparing alternatives for persistent abdominal pain in patients with pancreatitis.
- Although use of Erector Spinae Plane Block is described in patients with postoperative and chronic pain, evidence in acute pancreatitis remains limited.
- We present a case of analgesia and opioid cessation after ESPB in acute-on-chronic pancreatitis.

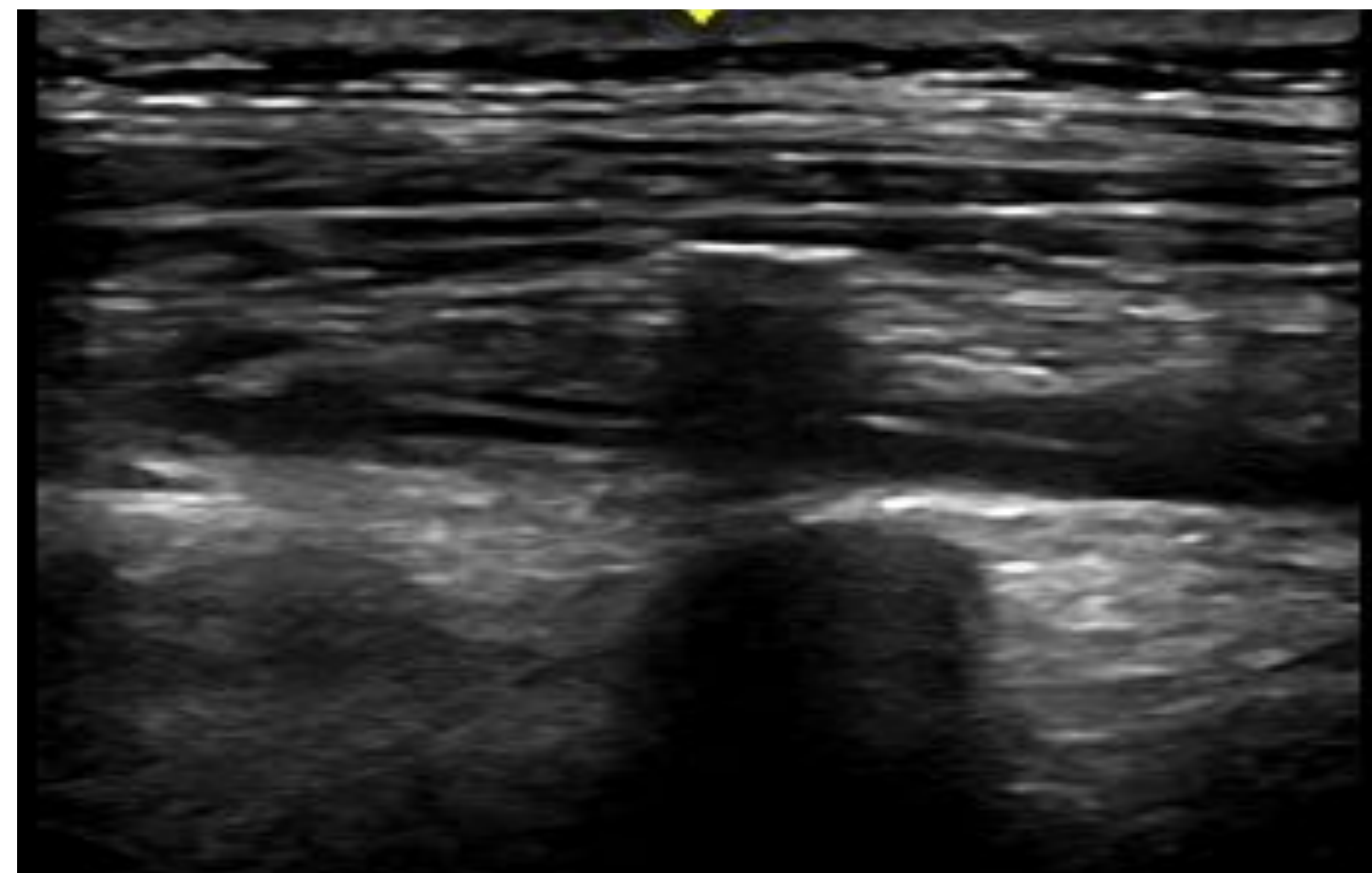


Figure 1: Ultrasound imaging of the Erector Spinae Block with evidence of anesthetic spread.

Case Presentation

- A 43-year-old Female with a past medical history of chronic pancreatitis with pancreatic stent, pancreatic divisum, anorexia nervosa with binge-purging, major depressive disorder, anxiety, gastroesophageal reflux disorder and chronic hyponatremia secondary to psychogenic polydipsia presents with acute left lower quadrant abdominal pain with associated nausea, vomiting and fever.
- A CT abdomen and pelvis with intravenous contrast highlighted a mild increase in a previously visualized fluid collection around the pancreatic tail.
- Before evaluation by the inpatient Pain Service, the patient was placed on hydromorphone 2mg/4mg tablets every four hours as needed for moderate/severe pain and hydromorphone 1 mg IV push every four hours for breakthrough pain.
- Despite initial pain regimen patient continued to have persistent pain; given no relief and concern for opioid-related adverse effects, a single-shot erector spinae plane block was offered and accepted.
- 18 mL of Bupivacaine 0.25% and 2 mL of Dexamethasone 5 mg preservative-free were drawn up into a 20 mL syringe.
- Using ultrasound guidance and identifying the lower border of the scapula as a landmark for T7, the T8 spinous process was located. Approximately 4 mL of Lidocaine 1% was utilized as local anesthesia. A 22 gauge 80 mm Pajunk needle was then introduced, in plane, and 15 mL of a Bupivacaine 0.25% and dexamethasone 5 mg preservative-free mixture was injected (Figure 1).
- Pre-block, the patient reported 9 out of 10 pain. Immediately post block, patient reported pain to be 3 out of 10.
- The inpatient opioid regimen was discontinued after intervention and the patient did not require additional modalities for analgesia.
- The patient was observed for an additional 24 hours inpatient and was discharged with resolution of symptoms.

Discussion

- The case highlights the potential role of the Erector Spinae Plane Block in managing pain secondary to acute pancreatitis while avoiding systemic opioid-related adverse effects.
- Although most literature emphasizes catheter-based or repeated ESPBs, this cases demonstrates that a solitary block can provide significant and sustained pain relief.
- Given the Erector Spinae Plane Block simplicity, safety profile, and versatility, it may serve as a practical adjunct to traditional pharmacologic strategies, especially in patients with contraindications to Traditional methods

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