



External Oblique Intercostal Block in Ostomy Patients: Case Reports

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INTRODUCTION

The external oblique intercostal (EOI) plane block is a regional technique that has gained popularity as an abdominal wall block, providing an alternative to traditional approaches such as the subcostal transversus abdominis plane (TAP) block and rectus sheath block. The technique involves injection of local anesthetic between the intercostal and external oblique muscles to block the anterior and lateral cutaneous branches of the thoracoabdominal nerves (T6-10), which results in upper abdominal analgesia. When scanning, it is easy to visualize superficial structures regardless of body habitus and the technique is not limited by abdominal tubes or drains within the operative field.

We present a series of 3 cases in which the EOI block was utilized as an effective alternative for abdominal wall analgesia.

METHODS

We got patient consent for regional anesthesia and inclusion in this submission of a case report. This case report is exempt from IRB review requirements per institutional policy.

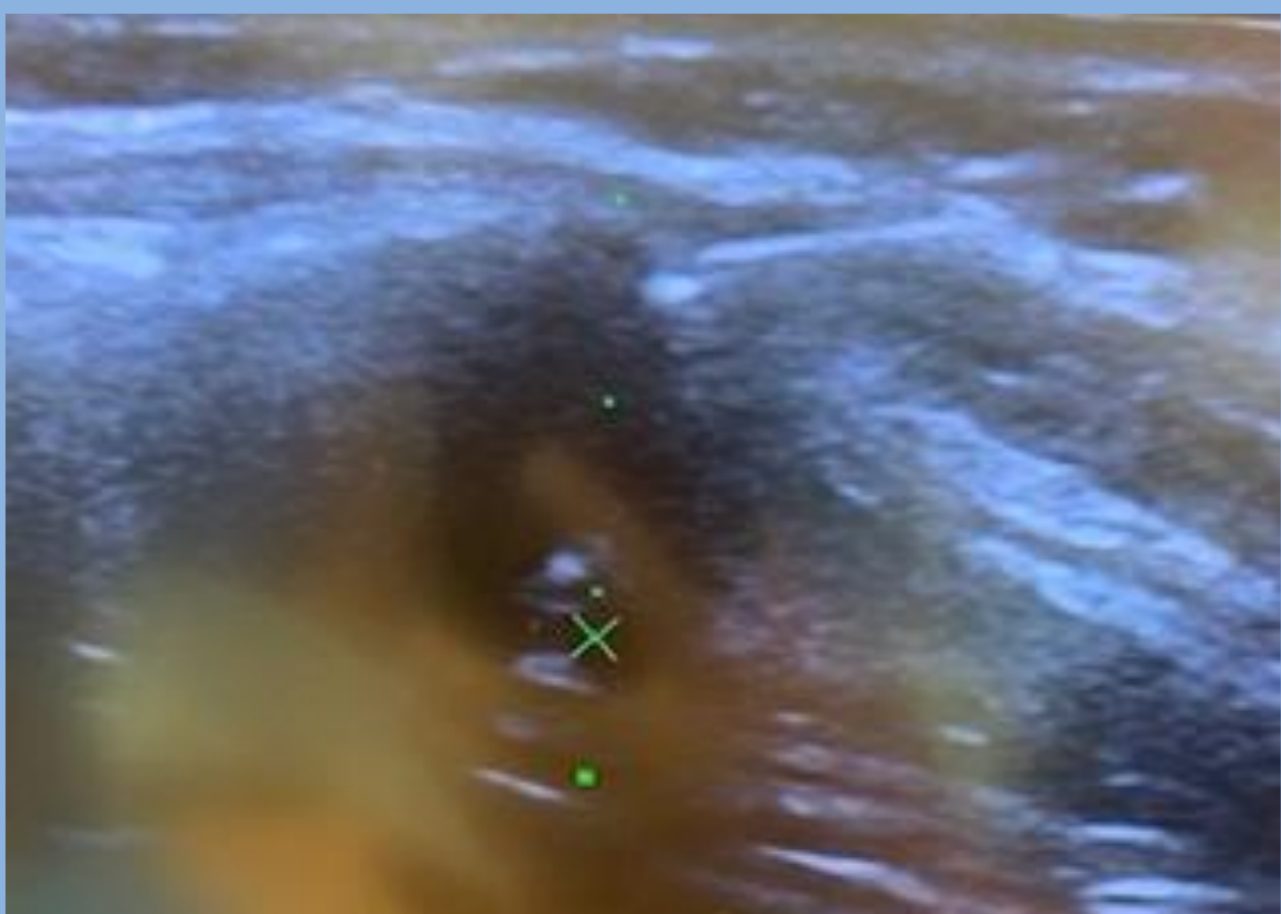
CASE 1

A 32-year-old female with history of small bowel cancer status post ileostomy presented for ileostomy takedown and stoma closure. Patient with ostomy site occupying the mid and upper abdomen. Bilateral ESP blocks (15 ml each) and QL blocks (25 cc each) were performed with 80 ml bupivacaine 0.25 plus decadron 10 mg and dexmedetomidine 50 mcg. She had zero pain in PACU, with score of 3/10 throughout her stay. She did have muscle spasms in her lower right abdominal area and these were relived with Robaxin.



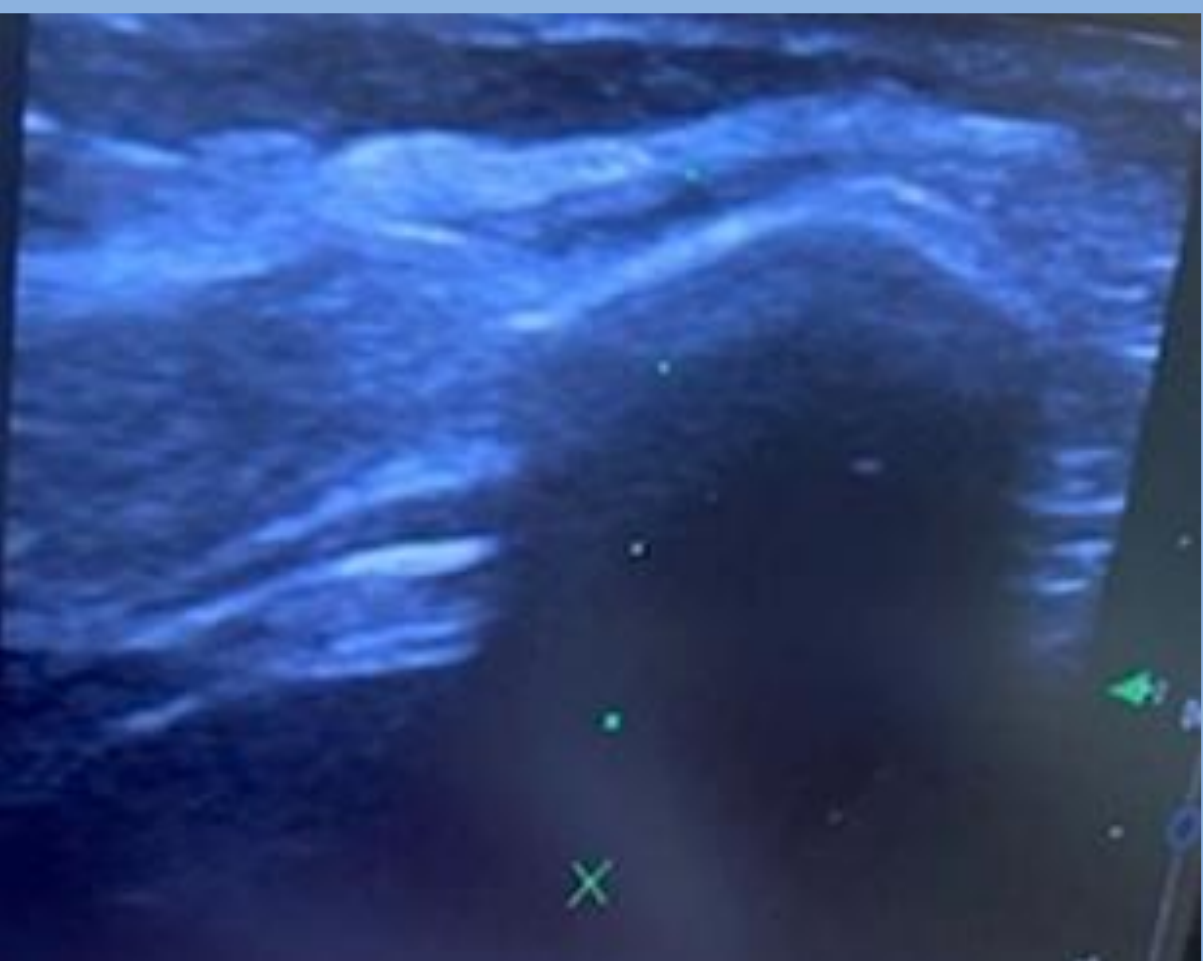
CASE 2

A 70-year old man with history of colorectal cancer status post ostomy and ileal bladder presented for an ex lap and resection and anastomosis of small bowel. Bilateral ESP blocks (15 ml each) and QL blocks (25 cc each) were performed with 80 ml bupivacaine 0.25 plus decadron 10 mg and dexmedetomidine 50 mcg. The patient stated that we has comfortable, with a pain score of 4 up to 24 hours.



CASE 3

A 77-year old man with history of cholangiocarcinoma presented for excision of bile duct tumor. He had a percutaneous cholecystostomy drain. Bilateral ESP block were performed with 15 ml per side of a bupivacaine 0.25 and liposomal bupivacaine Exparel mix, as well as bilateral QL blocks, 25 cc per side. The patient had good pain control, with the highest pain score at 4, and a personal patient goal of 4. He was discharged 4 days later, and the highest pain score during admission was 4.



DISCUSSION

These cases highlight the efficacy of the EOI block as an alternative strategy when ostomy and drains are obstructing access to the abdominal wall for traditional regional anesthesia techniques. By targeting the tissue plane between the external oblique and intercostal muscles, the EOI block offers more thorough coverage of the anterior and lateral branches of the thoracoabdominal nerves. Its superficial injection site, clear sonographic landmarks, and ease of placement makes it a valuable tool, particularly in complex cases (1). In these individual cases involving patients with ostomies or altered abdominal anatomy, the EOI block provided effective analgesia and reduced reliance on opioids. The block's superficial location distant from the surgical field and easy sonographic visualization allowed for optimal pain management in these scenarios (2).

Studies have demonstrated that the EOI block not only provides effective blockade of relevant nerve structures, but results in reduced opioid consumption and pain scores, thus mitigating opioid-related side effects in the postoperative period (4). In summary, the EOI block proves to be an effective alternative to upper abdominal fascial plane blocks, especially for patients with complex surgical histories or anatomical variables. By providing consistent sensory blockade and reducing opioid use, the EOI block enhances postoperative pain management and improves patient outcomes in abdominal surgeries.

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