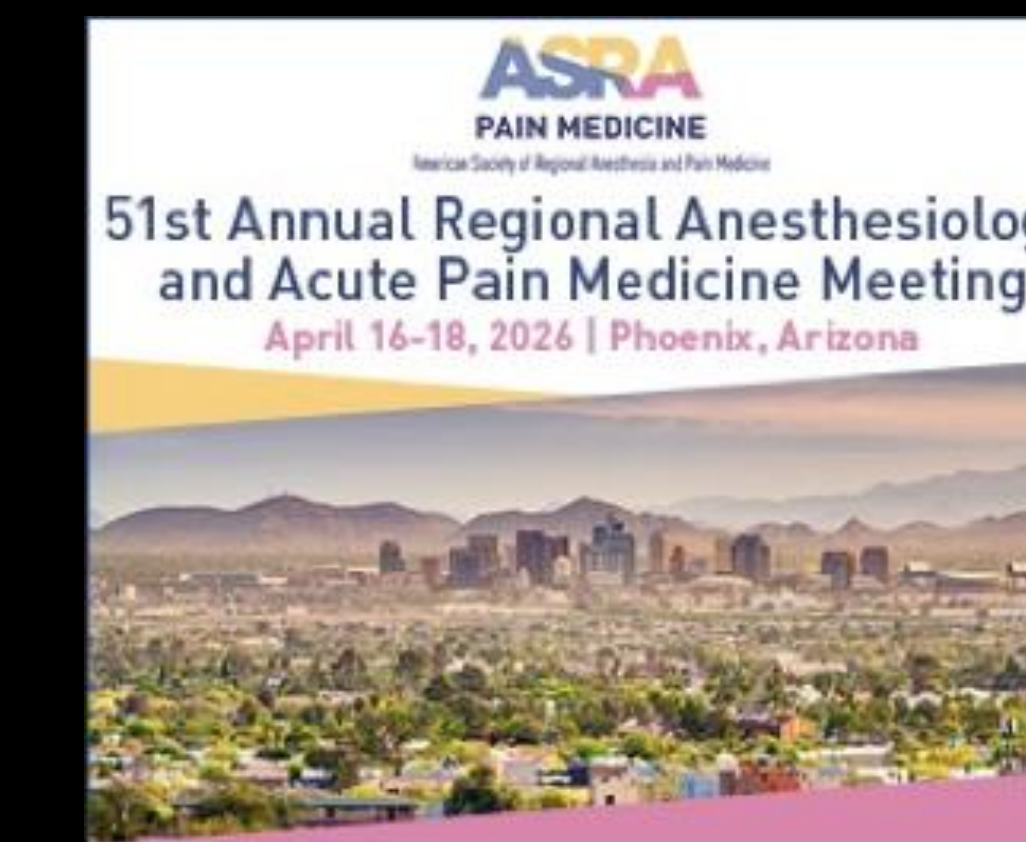


EOI Didn't See That Coming: External Oblique Intercostal Plane Block for an Unexpected Open Cholecystectomy

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Background

- External oblique intercostal (EOI) nerve blocks provide upper abdominal wall analgesia
- Target the lateral and anterior cutaneous branches of the T6–T10 intercostal nerves superficial to the external oblique muscle.
- This dermatomal coverage offers effective analgesia from the anterior axillary line to midline [1]

Methods

- Patient consent obtained for case reporting.
- Literature review exploring the safety and efficacy of EOI blocks
- IRB review not required per **Colorado Multiple Institutional Review Board** guidelines and no identifiable patient data is presented.

Resources

1. Elsharkawy H, Kolli S, Soliman LM, et al. The External Oblique Intercostal Block: Anatomic Evaluation and Case Series. Pain Med. 2021;22(11):2436-2442. doi:10.1093/pm/pnab296
2. Coşarcan SK, Erçelen Ö. The analgesic contribution of external oblique intercostal block: Case reports of 3 different surgeries and 3 spectacular effects. Medicine (Baltimore). 2022;101(36):e30435. doi:10.1097/MD.00000000000030435
3. Liotiri D, Diamantis A, Papapetrou E, et al. External oblique intercostal (EOI) block for enhanced recovery after liver surgery: a case series. Anaesth Rep. 2023;11(1):e12225. Published 2023 Apr 27. doi:10.1002/anr3.12225
4. Moharam SA, ElSharkawy MS, Almohasseb MA, Hamama K, Mahmoud MA, Abogabal MA. Ultrasound-guided external oblique intercostal plane block versus thoracic erector spinae block for post-thoracotomy pain: A randomised double-blinded non-inferior clinical study. Indian J Anaesth. 2025;69(8):809-815. doi:10.4103/ija.ija_3_25

Case Presentation

- 64 male presenting for robotic cholecystectomy.
- Unexpectedly converted to open.
- Acute Pain Service consulted for epidural:
 - Received heparin for DVT prophylaxis
 - Not consented for this pre-operatively
 - Deferred until the patient was able to participate in shared decision making.
 - Truncal nerve block was pursued, consent from MDPOA
- Ultrasound guided EOI block was performed
- Postoperatively, reported excellent pain control, required only scheduled acetaminophen
- Did not require epidural or opioids during his recovery and was discharged on POD 2 without additional analgesics.

Discussion

- Superficial, easily identifiable fascial plane block:
 - Less invasive than neuraxial
 - Anticoagulation not a contraindication
 - Both laparoscopic and open surgeries.[2]
- Helped preserve patient-centered care while providing effective analgesia.
- Prior studies have demonstrated EOI efficacy in
 - Open hepatectomy
 - Liver transplantation
 - Thoracotomy
- Direct comparisons with epidural analgesia are lacking and remain an area of future study. [3,4]

