Quadratus Lumborum Peripheral Nerve Catheter for Refractory Abdominal Pain due to a Degenerating Fibroid in a Pregnant Patient

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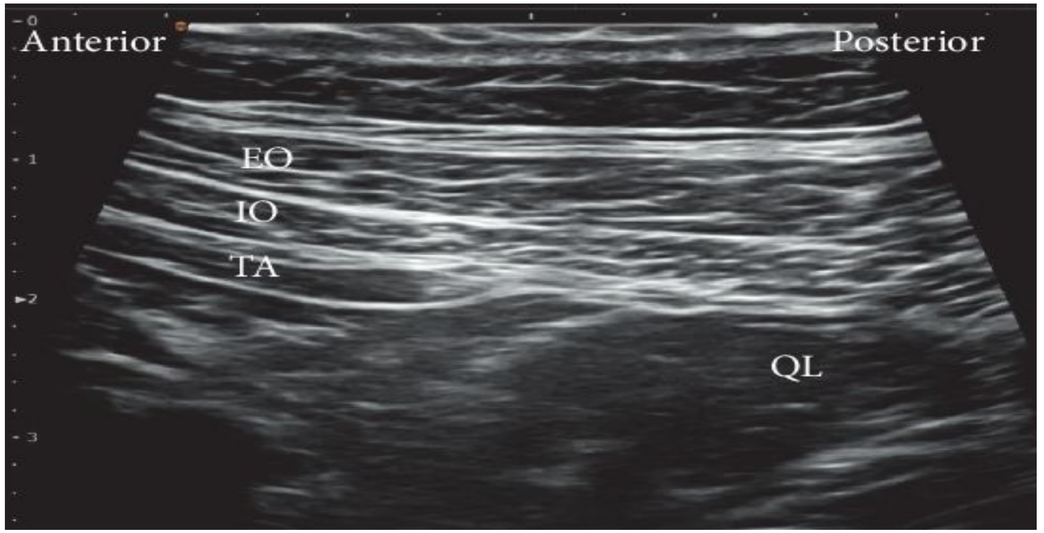
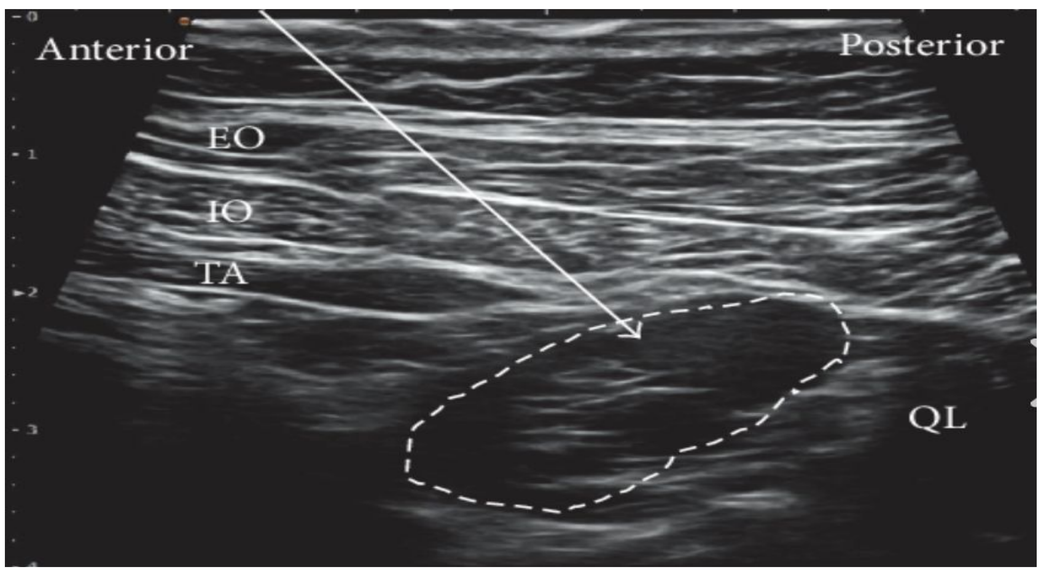
Background

- Pain from degenerating uterine fibroids during pregnancy can be severe and challenging to manage due to limitations on systemic analgesics and concerns for maternal and fetal safety.

- Regional anesthesia techniques may offer effective, opioid-sparing analgesia in select obstetric patients.

- We describe the successful use of a quadratus lumborum (QL) peripheral nerve catheter for refractory abdominal pain due to a degenerating fibroid in a pregnant patient.





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Case Report

- A 24-year-old G1P0 woman at 23 weeks and 4 days' gestation with a known large left pedunculated fibroid and hydronephrosis status post ureteral stent placement 10 days prior presented with worsening abdominal pain.
- She reported baseline pain of 8/10, escalating to 10/10 with movement, resulting in markedly limited mobility.
- Pelvic Ultrasound demonstrated a heterogeneous echogenic left adnexal mass measuring 12 × 7 × 10 cm consistent with a degenerating fibroid. Fetal non-stress testing was reactive and reassuring for gestational age.
- Initial pain management included oxycodone, intravenous hydromorphone, ketorolac, and lidocaine patches with minimal relief.
- Despite ureteral stent removal by urology, her pain persisted. Transition to a hydromorphone PCA provided rest but inadequate analgesia, with ongoing severe pain at rest and with movement.
- The anesthesia team performed a right-sided single-shot QL block using 30 mL of 0.375% ropivacaine with epinephrine (1:200,000), resulting in significant pain relief. As analgesia waned, a right QL peripheral nerve catheter was placed and hand bloused twice daily with 20 mL of 0.375% bupivacaine with epinephrine.
- With the peripheral QL nerve block, the patient reported pain improvement to 1/10, ambulated, and participated in physical therapy. The catheter remained in place for four days, after which she was discharged on oral multimodal analgesics.

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Teaching Points

- This case highlights the utility of a QL peripheral nerve catheter as an effective, opioid-sparing analgesia strategy for severe fibroid-related pain during pregnancy.
- The QL block provided substantial functional improvement when systemic therapies failed, allowing ambulation and recovery while minimizing opioid exposure.
- Peripheral nerve catheters may represent a valuable option for managing refractory non-obstetric abdominal pain in pregnant patients, though further study is needed to define its safety profile and optimal dosing in this population.

References

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