Quadratus lumborum catheters for analgesia after a laparotomy in 11 year old child

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Introduction
Unilateral, continuous quadratus lumborum catheter has been described postoperative analgesia after abdominal surgery in a child.(1) This approach was thought to provide superior analgesia to transversus abdominus plane (TAP) blocks. We report the use of bilateral continuous Quadratus Lumborum blocks for analgesia after a diagnostic laparoscopy and laparotomy for excision of ovarian mass in a child.

Case Report
In the days following surgery, the patient received ketorolac 10mg IV Q6 hours, acetaminophen 400mg IV Q24 hours, and morphine 2mg IV as needed. On the evening of postoperative day 0, she received 2mg of morphine for 1/10 pain at the incision site. On postoperative day 1, she again received morphine 2mg for 6/10 pain at one of the catheter sites. This was relieved when the catheter was pulled out to 9cm at the skin. The catheters were removed on postoperative day 2, she was discharged on postoperative day 3 and no further opioids were required. No complications were reported.

Conclusion
This block may be a good alternative to TAP block by providing wider dermatomal coverage, here, T8-L1 in our case.(1) This phenomena may be due to spread of local anesthetic in the paravertebral space.(2)

While catheters placed preoperatively would obstruct the surgical field, the single shot TAP blocks still help minimize intraoperative opioid requirements. Together, the techniques provided excellent analgesia and minimal opioid requirements. The catheters were easy to place and well tolerated making them a viable option for postoperative analgesia in children.

Case Report
The patient is an 11 year old, 41kg child scheduled for a laparotomy and excision of ovarian mass. Bilateral rectus sheath blocks using 5mL of 0.2% ropivacaine each and bilateral TAP blocks using 8mL of 0.2% ropivacaine each were performed after induction of general anesthesia to achieve preemptive analgesia. Intraoperative anesthesia was maintained with sevoflurane and 100mcg of fentanyl for a 3 hour operation. Quadratus lumborum catheters were placed with ultrasound guidance after completion of surgery. Infusion of local anesthetic was started in the recovery room. While in the PACU, she required no additional pain medications.

References
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