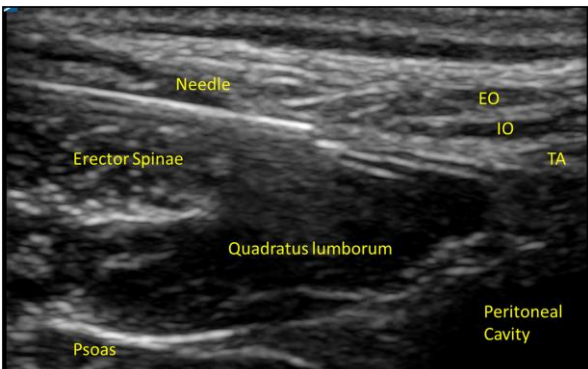


INTRODUCTION

- The anesthetic management of children with epidermolysis bullosa (EB) can present an array of unique challenges to the perioperative team including difficult airway and pain management. The skin care of EB patients involves daily painful interventions and regular use of opioids, resulting in opioid tolerance.
- Quadratus lumborum block has been used for adult patients, but only recently described for postoperative analgesia in pediatric patients.
- We report the use of ultrasound-guided quadratus lumborum block for postoperative analgesia in a 10 month old with recessive dystrophic EB and chronic pain.

FIGURE 1. Ultrasound Image of Quadratus Lumborum Block



CASE REPORT

7.8 kg 10 month old infant presented for open gastrostomy tube placement and circumcision. Written informed consent to present this case was obtained from the parent.

PMH: recessive dystrophic EB, Gastroesophageal reflux, chronic pain, failure to thrive

Chronic pain medications:

- oxycodone 0.5 milligrams (mg) every 6 hours prn
- gabapentin 75 mg every 8 hours
- ibuprofen 75 mg daily
- midazolam 2 mg prn
- Pre-medicated with midazolam 4 mg and then induction with sevoflurane using a well lubricated mask.
- Special skin precautions used to secure intravenous (IV) access.
- Airway was secured via video laryngoscopy.
- Maintenance with air/oxygen/sevoflurane.
- IV acetaminophen 80 mg, ketorolac 4 mg, and hydromorphone 400 micrograms (mcg) were given for analgesia.
- At the end of the surgery, the patient was placed in the lateral position for placement of ultrasound guided quadratus lumborum block.
- Generous use of gel to minimize friction of the ultrasound probe on the skin.
- Bilateral QL 2 blocks were performed using 5 mL of 0.2 % ropivacaine deposited posteriorly to the QL on each side.
- Open bullous wounds on the anterior and lateral aspects of the abdomen required alteration of the needle trajectory to a posterior-anterior approach, piercing through the erector spinae muscles as depicted in figure 1.

| Hours | 1 h | 2 h | 4 h | 8 h | 12 h | 16 h |
|-------|-----|-----|-----|-----|------|------|
| FLACC | 0 | 0 | 3 | 3 | 0 | 5 |

- Home pain medications were restarted 6 hours after recovery.
- No IV rescue medications required.
- Analgesic duration of the block was estimated to be 17 hours.
- The patient was discharged home on postoperative day 2 on his home pain regimen.

DISCUSSION

- Quadratus lumborum block may be an effective analgesia option and has been shown to reduce morphine consumption for abdominal surgery in adult patients. We report one of the youngest cases of ultrasound guided quadratus lumborum block in a pediatric patient.
- Particularly challenging in this patient is the size of the patient and required posterior-anterior trajectory of the needle to avoid the bullous abdominal wounds.
- We demonstrate that the QL block can be performed in young infants, improving patient pain and reducing postoperative IV pain medications.

FIGURE 2. Image of chest and abdomen bullae



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