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Letter to Editor

Bilateral Tap Block for Postoperative Analgesia in Bladder Augmentation Surgery -

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LETTER TO EDITOR

We report a case of 10 year old female child weighing 21 kg with neurogenic bladder with hydronephrosis (L > R) with L5 spina bifida, lumbar and sacral scoliosis, hydromelia at C3-C7 and syringomyelia D3 and L1 level with hypertension on T. Amlodipine 2.5 mg OD. Neurogenic Bladder Sphincter Dysfunction (NBSD) can develop as a result of a lesion at any level in the nervous system, including the cerebral cortex, spinal cord, or peripheral nervous system [1]. Neurologic conditions in children leading to neurogenic bladder dysfunction are predominantly congenital neural tube defects (including myelomeningocele, lipomeningocele, sacral agenesis, and occult lesions causing tethered cord) [2]. Many anaesthesiologists have utilized epidural anaesthesia or used systemic analgesics in form of opioids and paracetamol given through parenteral route [3]. But in our case there were associated neural tube defects throughout the spinal cord which are commonly associated with neurogenic bladder, so we could not use epidural anaesthesia in our patient. Preoperatively patient received tab. amlodipine 2.5 mg and alprazolam 0.125 mg orally. Patient was premedicated with morphine 1.5 mg, given intravenously. Induction of anaesthesia was done with propofol 50 + 20 mg intravenous with O₂ + N₂O + sevoflurane (2-4%). After giving atracurium 10 mg iv, patient's trachea was intubated with 5.5 oral non cuffed tracheal tube secured at 15 cm and patient was maintained with O₂ + N₂O + sevoflurane (1-2%) with atracurium by continuous infusion of 10 mg/hr. General anaesthesia was supplemented with B/L TAP block intraoperatively for bladder augmentation (cystoplasty) which lasted for 4 hours and 35 minutes. We used B/L TAP block by using 2 pop technique by loss of resistance and Leaderflex catheters were instituted on both sides by seldinger technique without using ultrasound and 5 mL of 2% ropivacaine + 20 µg clonidine was given to supplement general anaesthesia which helped in maintaining adequate plane of anaesthesia along with decreased requirements of



Figure 1: Bilateral tap block using leaderflex catheter.



Figure 2: Tap block.

opioids and antihypertensive intraoperatively. Patient's vitals were stable throughout the duration of surgery. Intermittent surge of high blood pressures but with stable heart rate while surgical manipulation was managed by boluses of injection labetalol 5 mg. Blood loss was 260 mL. Patient's trachea was extubated after 4 hours and 35 minutes with neostigmine 1mg along with glycopyrolate 0.2 mg and was shifted to Postoperative Care Unit (PACU). Postoperatively analgesic requirement was met by intermittent boluses of ropivacaine 2% through leaderflex catheters in situ for 48 hours and was supplemented with NSAIDs which decreased the requirement and unnecessary side effects of opioids and NSAIDs. So it can be concluded that B/L TAP block can be used as an alternative modality to epidural or caudal anaesthesia and systemic opioids for intraoperative and postoperative analgesia in bladder augmentation surgeries with a good safety profile in such patients [4-6].

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