

[NM-217] Providing effective perioperative analgesia with a unilateral Transversus Abdominis Plane (TAP) block in a patient with suspected severe narcotic allergies undergoing a baclofen pump revision

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Regional analgesia is an excellent alternative for patients who may have contraindications to intravenous narcotics for perioperative analgesia.¹ The transversus abdominis plane (TAP) block is a peripheral nerve block which can provide sustained abdominal wall analgesia for lower and middle abdominal surgery and offers an alternative to parenteral opioids in these situations. ^{2, 3}

A 23 year-old, 47.6 kg patient presented for a baclofen pump revision with an abdominal incisional approach for continued treatment of his spastic quadriplegia. He had documented history of allergies to intravenous morphine, fentanyl and hydromorphone all leading to 'tremors,' general irritability and hemodynamic instability. The patient had undergone surgical procedures with no intravenous narcotic and had subsequent pain after receiving only adjunctive analgesics. On the day of surgery an intravenous catheter was placed using nitrous oxide and oxygen. Anesthesia was induced with propofol followed by endotracheal intubation. Prior to the start of the surgical procedure a left sided TAP block was performed using ultrasound guidance. The appropriate layers were visualized just lateral to the prior incision and medial to the triangle of Petit. A total of 10 ml of 0.5% ropivacaine was injected with incremental aspiration and injection. The patient was also given weight based intravenous acetaminophen and ketorolac intra-operatively. The surgery, which included a repeat left sided anterior abdominal wall incision approximating six inches, was without complications. The patient's hemodynamic status remained were stable throughout with an end-tidal sevoflurane concentration of 2-3%. The patient received no additional pain medications in the immediate post-operative period. The family was very satisfied with the patient's pain relief and stated that they will request it for any further baclofen pump revisions.

TAP block does not provide full surgical anesthesia for intra-abdominal manipulation. However, it will decrease both intraoperative and postoperative opioid requirements and in many cases may provide analgesia that is effective enough to eliminate the need for opioids. Preliminary data has shown that a TAP block may provide more effective analgesia, prolong the time to the first request for opioids and lower visual analog scores (VAS) in comparison to local infiltration by the surgeon.⁴

References

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