

Transversus abdominus plane block as major component for pain management of necrotizing abdominal wall carcinoma.

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Introduction

The transversus abdominus plane (TAP) block is commonly used as a method of supplemental analgesia in abdominal surgeries. While this block has become commonplace for treating incisional pain, this case demonstrates a specific instance in which the TAP block became a major component of the patient’s post-operative analgesia. In this case, we discuss using TAP blocks for surgical disease involving the abdominal wall.

Materials and Methods

Patient informed consent was obtained for submission of a case report.

Case History

58 y/o female who had an abdominal wall debridement and debulking for a necrotizing abdominal wall mass

Past medical history: Metastatic squamous cell carcinoma, hypothyroidism, and chronic cancer pain with daily opioid use.

Home medications: Hydrocodone, levothyroxine

Allergies: None



Figure 1: Ultrasonography of TAP block

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The Challenge

Timeline:

Pre-op Course:

- Patient was admitted to the hospital for a necrotizing abdominal wall mass in the setting of squamous cell carcinoma
- In hospital pain scores of 8-9/10
- Pain regimen of scheduled oral hydrocodone, as needed oral oxycodone, and intravenous morphine for breakthrough pain.
- She was scheduled for an abdominal wall debulking and debridement prior to starting chemotherapy.

Intra-op Course:

- She received 50 mcg of fentanyl on induction, 8 mg of dexamethasone, and 20 mg of methadone.
- Post induction, a lateral TAP block was performed with 30ml per side of 0.25% ropivacaine and epinephrine 1:200,000, under ultrasound guidance (Figure 1).

Post-op Course:

- In PACU the patient reported 0/10 pain for the first 6 hours post procedure, then 2/10 pain
- On reevaluation two days post op, she reported good pain relief with an “abrupt increase” in pain about 24 hours after the procedure with associated increase in her opioid intake.
- Pain scores returned to 8-9/10 in severity

Discussion

Rationale for treatment plan:

- TAP block places local anesthetic between transversus abdominis and internal oblique muscle planes; this will target the anterior rami of T7-T12.^{1,2}
- Epinephrine was added to increase block duration¹
- Intravenous methadone was started in the OR for longer duration of action and NMDA receptor benefits

Change in approach:

- Continuous infusion catheters³
- Preservative free dexamethasone
- Incorporation of methadone into pain regimen

References

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