



Perioperative Regional Anesthesia for a Rare Case of Interscapulothoracic “Forequarter” Amputation in a Patient with Osteosarcoma

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Introduction

- Interscapulothoracic “forequarter” amputation is a complex, rarely performed procedure that involves surgically removing the entire upper limb and shoulder joint from the scapula and thoracic wall
- Typically performed as a last resort for treating devastating cases of trauma, infection, or tumors
- Pain control can be incredibly challenging for these patients and often requires a multimodal approach

Case

- 61-year-old male with a high-grade 16.3 x 16.2 x 15.6 cm shoulder osteosarcoma secondary to Paget’s disease who presented for forequarter amputation
- Significant pain pre-operatively requiring hospital admission for pain management

Pain Regimens

Prior to procedure:

- Fentanyl PCA with basal rate 100mcg per hour and bolus dose of 50 mcg q10min with a 4-hour limit of 640mcg
- 100mcg IV fentanyl q4hr PRN for breakthrough pain
- Duloxetine 60mg daily
- Acetaminophen 1g q8hr
- Dexamethasone 4mg daily
- Lidocaine patches

Intra-op:

- Ketamine infusion 0.35mcg/kg/hr
- No long acting narcotics

PACU:

- 4 doses 25mcg fentanyl
- 2 doses 0.5mg hydromorphone
- Restarted PCA & pain regimen as prior to the procedure

POD #1-3:

- Reported pain as "manageable" with scores as low as 0 and 3

Discussion & Conclusion

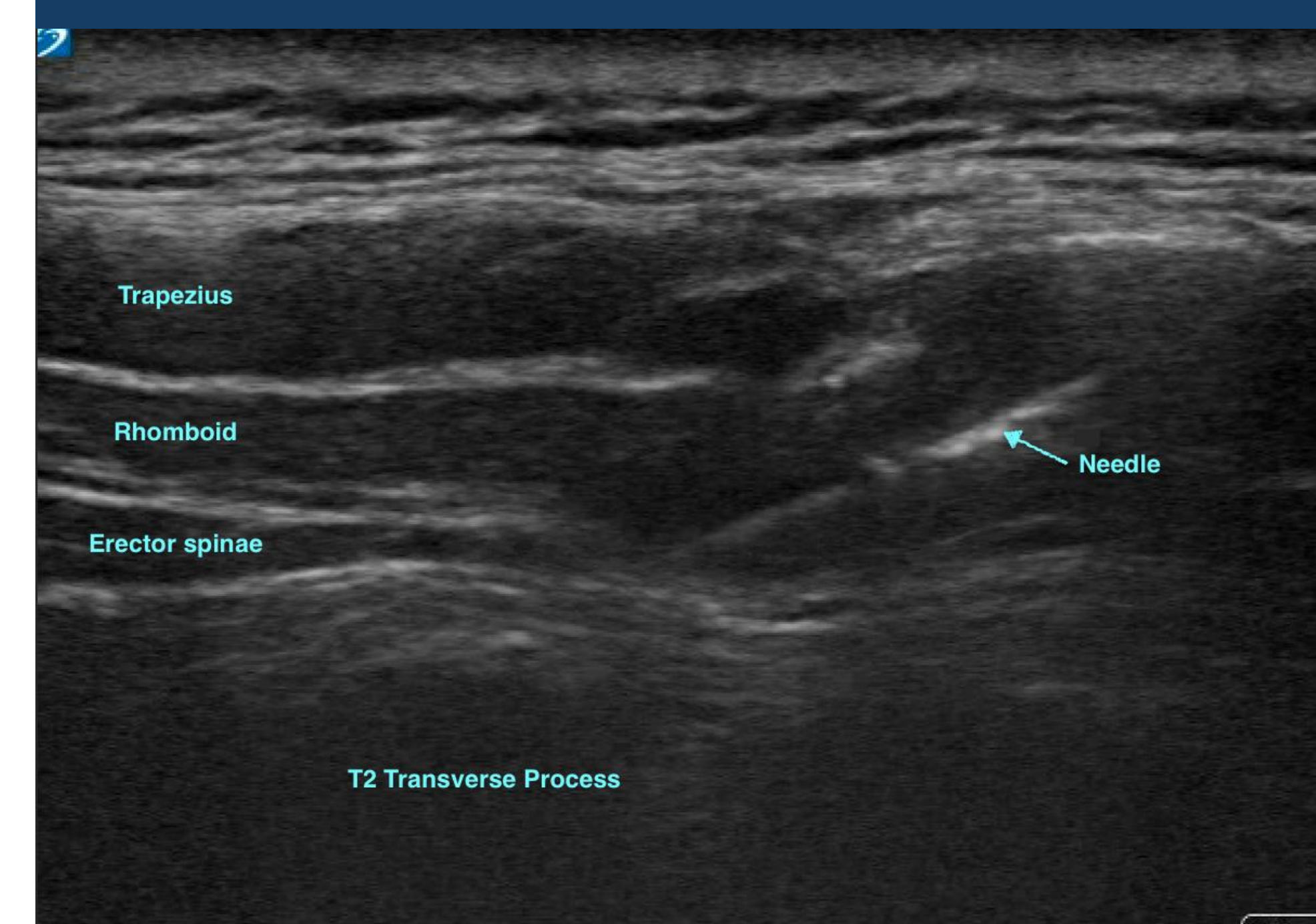
- There are several case reports of peripheral nerve catheters utilized for pain management for forequarter amputations, but to our knowledge this is the first documented case report of single shot injections with liposomal bupivacaine utilized for analgesia for such procedures
- Single shot injections utilizing liposomal bupivacaine can provide up to 72 hours of analgesic benefit while limiting the risk of infection and catheter malfunction or dislodgement associated with peripheral nerve catheters

Interscalene Block



15mL 0.5% bupivacaine and 133mg liposomal bupivacaine (Exparel)

T2 ESP Block



10ml 0.5% bupivacaine and 133mg liposomal bupivacaine (Exparel)

References

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