

Restarting Rivaroxaban with an Erector Spinae Plane Catheter after Thoracic Surgery

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Introduction

- Thoracic epidural analgesia (TEA) is the gold standard for acute post-thoracotomy pain; catheter placement/removal contraindicated in anticoagulated (AC) patients due to risk of epidural hematoma [1]
- The erector spinae plane (ESP) catheter is an alternative technique with less stringent AC guidelines [2]

Here, we present a 78-year-old male with a complex history requiring perioperative AC who underwent successful ESP catheter placement for thoracic analgesia.

Methods

- Devoid of patient identifiable information, exempt from IRB review as per Mount Sinai Hospital policy
- An 18-gauge Tuohy advanced under ultrasound guidance until contact was made with T5 transverse process (TP). A 20-gauge catheter inserted through Tuohy, needle removed, and catheter secured, administering 0.25% bupivacaine every 3 hours intra- and post-operatively

Results

Case: A 78-year-old male smoker with hypertension, coronary artery disease, rate-controlled atrial fibrillation on rivaroxaban, abdominal artery aneurysm with endovascular aortic repair, and a right upper lobe nodule requiring video-assisted thoracoscopic wedge resection. The patient discontinued rivaroxaban 3 days prior to surgery per cardiologist recommendations.

After uneventful ESP catheter placement and intra-op course, the patient reported mean 2/10 pain throughout post-op course, resuming AC on postop day one. Catheter was removed postop day two and discharged same day.

Figure 1. Top, anatomy of ESP with needle depositing local from cephalad to caudad; Bottom Left, positioning of probe for ESP block; Bottom Right, Ultrasound image for ESP block;

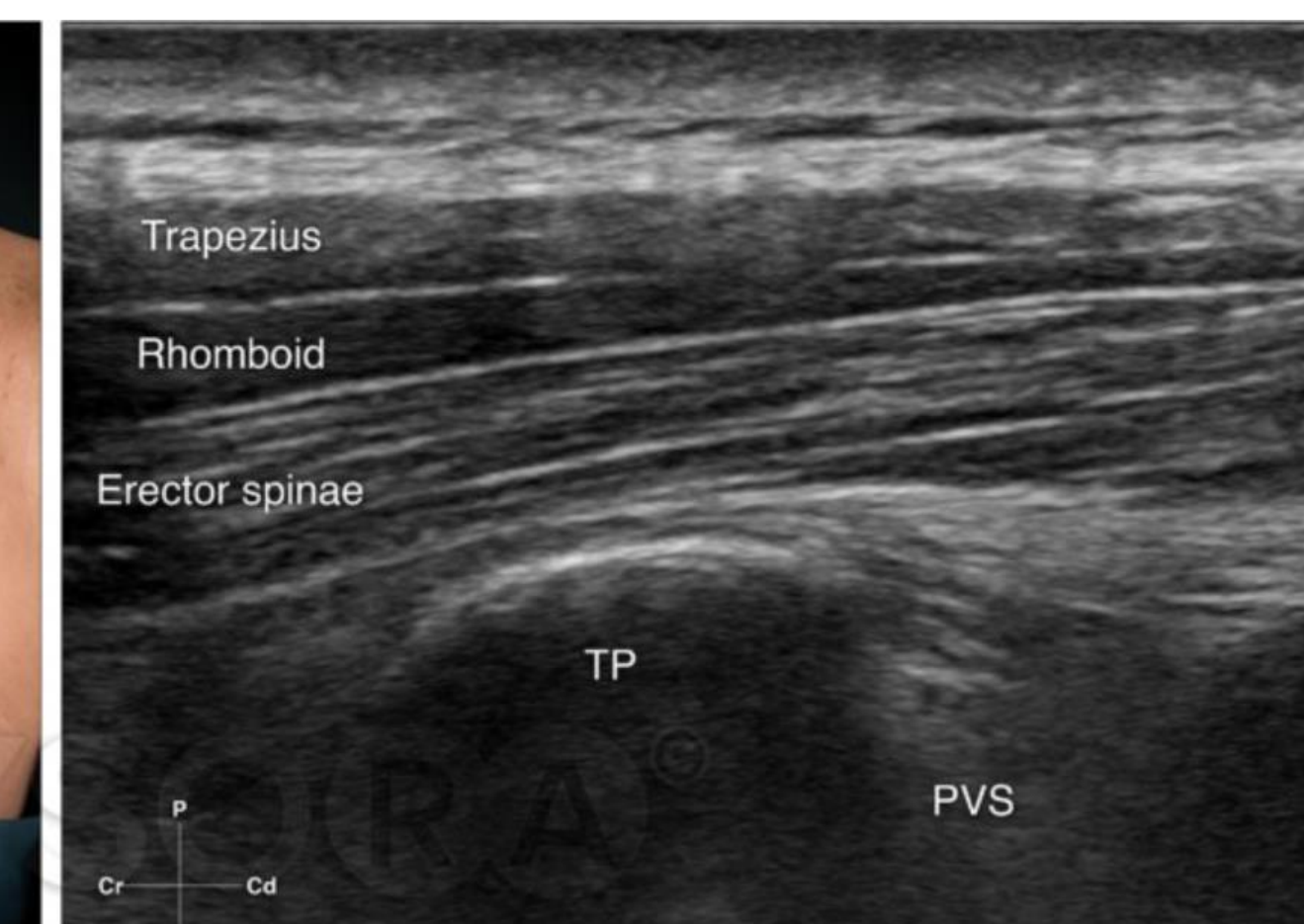
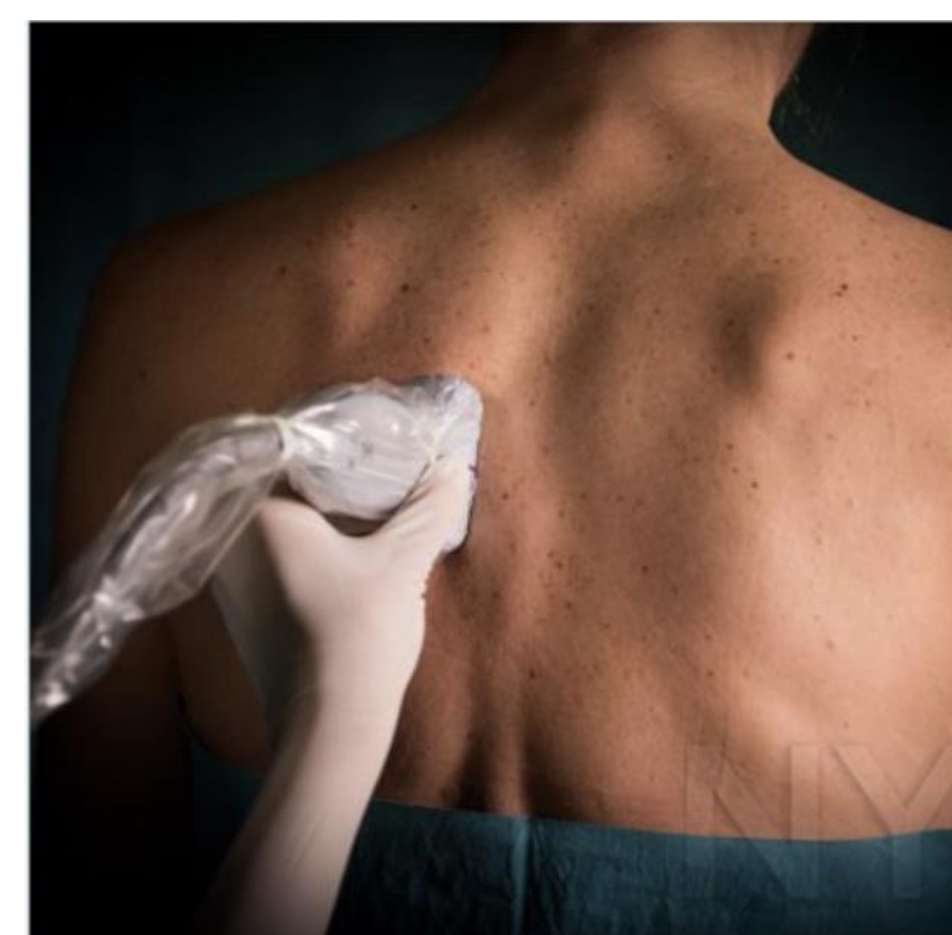
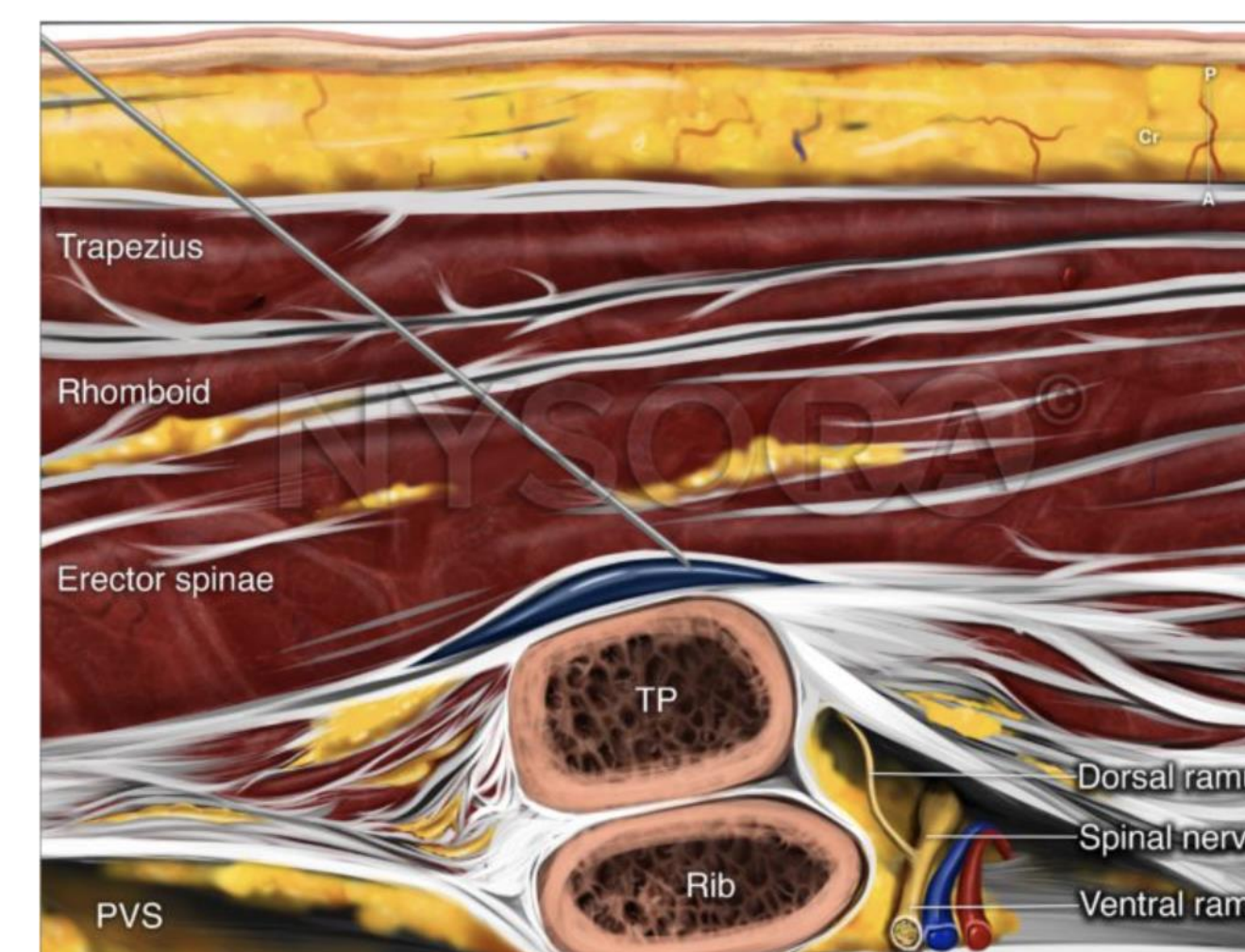


Image credit: <https://www.nysora.com/erector-spinae-plane-block/>

Discussion

- **In cases where AC must be restarted immediately, ESP catheter may be a viable option and is preferable to thoracic epidural**
- Additional studies needed to determine safety with AC and efficacy compared to neuraxial analgesia

References

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