

Introduction

- Traditional multi-port robotic-assisted lobectomy requires 3-4 port sites
- At our institution, the pain is typically treated with intercostal and paravertebral nerve blocks
- Single port robotic assisted surgery is a novel approach with proposed decreased tissue trauma, shorter hospital stay, faster return to normal activity, lower blood loss, and decreased scarring
- Presumptively, this *should* cause less post-op pain
- Our case demonstrates the post-op pain to be significant
- A localized PVB catheter would be beneficial

Case Report

- 73F with adenocarcinoma of the right lung underwent the first single-port robotic lobectomy in the western United States.
- A single subcostal incision at T9-10 (5-6cm) and right upper lobectomy performed
- Intra-op pain medications: 100 mcg fentanyl, 400 mcg hydromorphone, 50 mg of ketamine, 1000 mg of acetaminophen, 500 mg of methocarbamol, intercostal nerve blocks at T4-T10 levels using 20 mL 0.25% bupivacaine with epinephrine
- Additionally, a single-shot paravertebral nerve block at the T7-T8 level using 20 mL of 0.25% bupivacaine with epinephrine
- The patient's pain was well controlled immediately post-op, but pain drastically increased in the early morning of post-op day 1
- She experienced persistent uncontrolled incisional pain throughout her hospital stay

Case Details

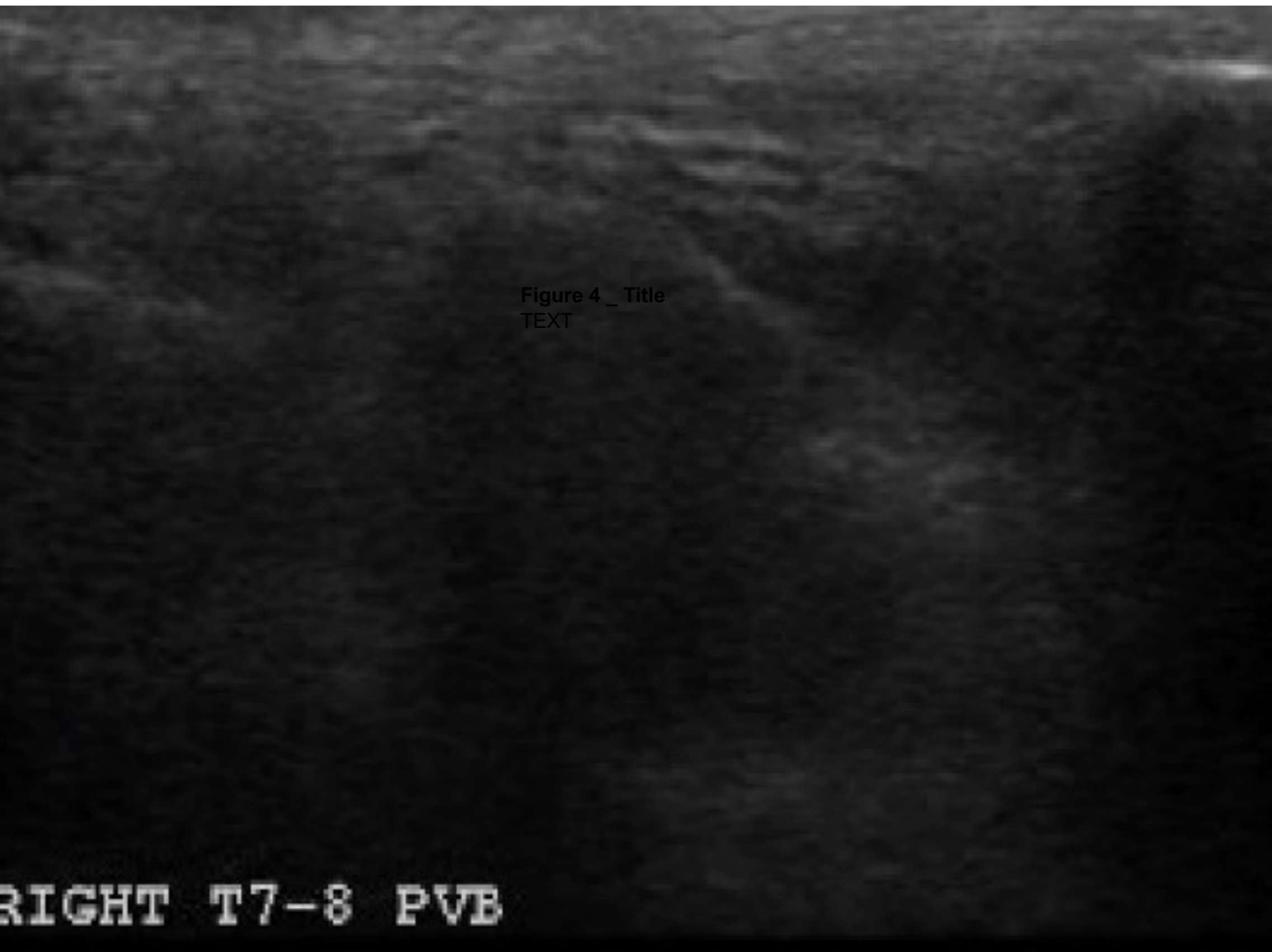
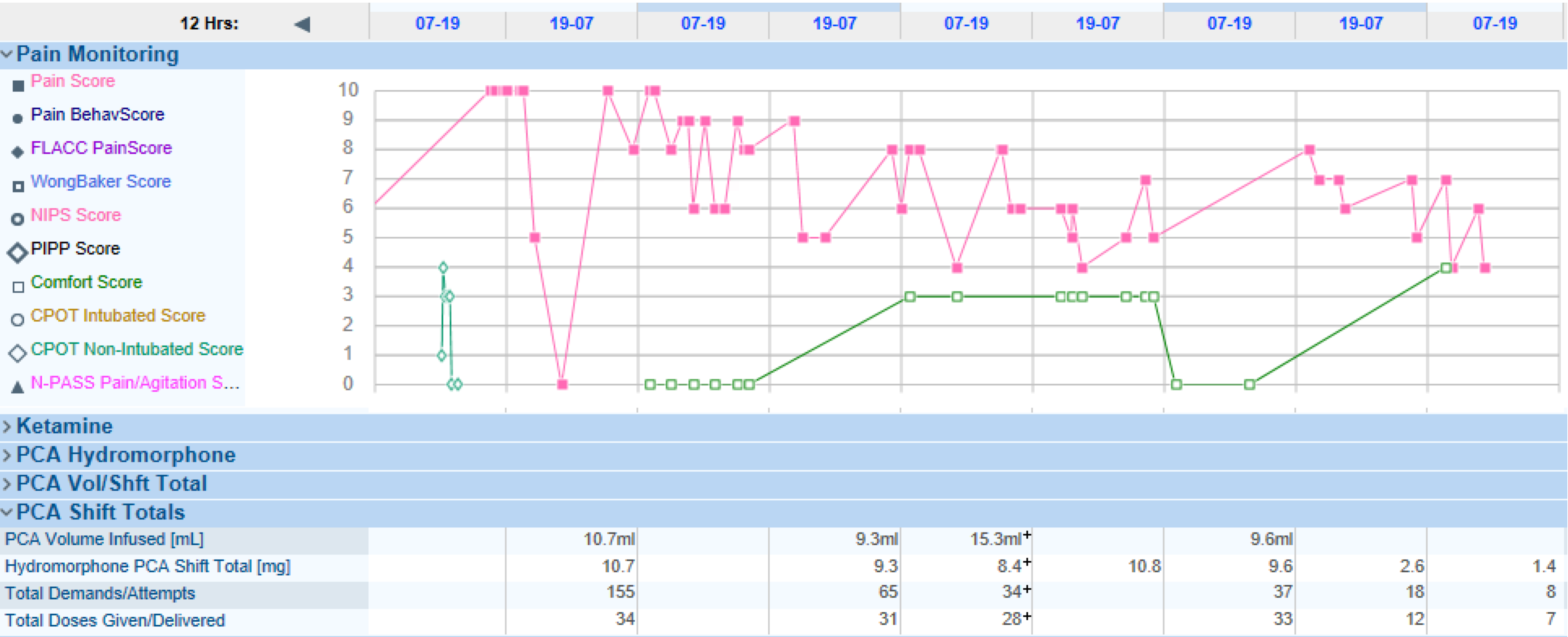


Figure 1: Ultrasound image of paravertebral block



Figure 2: Post operative image of surgical incision and chest tube

Discussion

- Expectation: reduced postoperative pain with single-port robotic-assisted thoracic surgery
- Reality: significant incisional pain that was difficult to control despite a combination of single-shot intercostal and paravertebral nerve blocks
- Highlights the limitations of a single-shot paravertebral block and suggests a potential benefit of a post-op day 0 catheter-based approach for sustained analgesia
- Anticipated advancements in smaller single-port sites may promise enhanced outcomes in the future

References

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