

TAP Block for Ankle Surgery?

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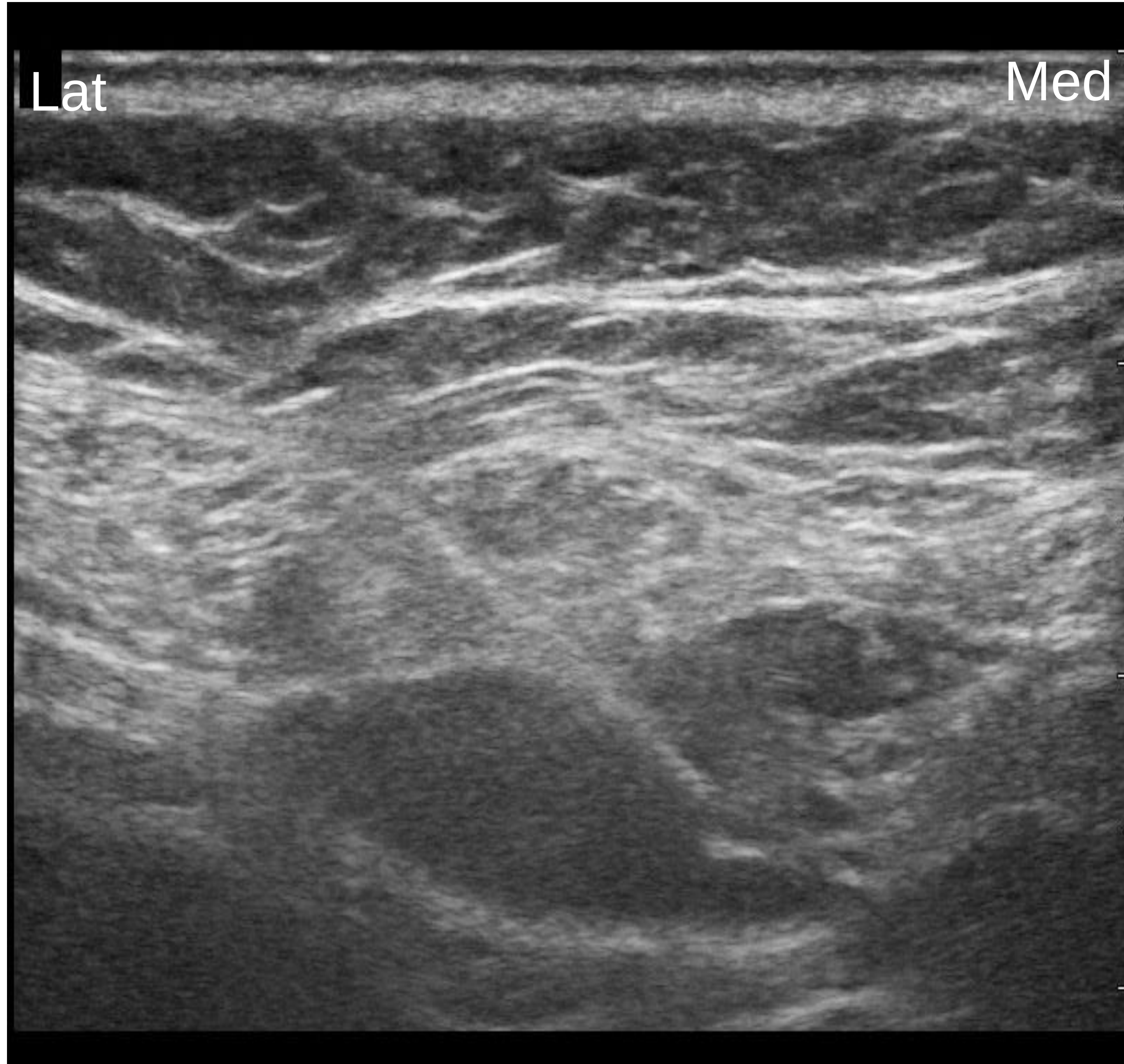
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INTRODUCTION

Iliac bone grafts can be used to promote healing from joint fusions, however the donor site may be more painful than the primary surgical site.¹ Transversus Abdominis Plane Blocks prior to iliac bone graft harvest can provide preemptive analgesia, decreased post-operative delirium, and decrease risk for developing chronic pain.^{2,3} Our patient a 32-year-old female with multiple joint instability secondary to Ehlers-Danlos syndrome, history of over 30 orthopedic surgeries, and chronic pain requiring up to 30mg Oxycodone daily presenting for left ankle fusion revision. She had a previous ankle fusion and the post-operative pain was so severe that she required unplanned hospital admission for pain control. The patient stated that, although her ankle hurt, her iliac crest bone graft donor site was more painful. The plan was for the patient to be admitted post-operatively for pain control. She had not taken any of her home oxycodone the day of surgery.

METHODS

Nerve blocks were performed in the pre-operative area. The patient was first positioned right lateral decubitus. A popliteal nerve block was performed with 25mL of 0.25% Bupivacaine and a peripheral nerve catheter was inserted. With the patient still on her side, a left-sided TAP block was performed with 20mL of 0.25% Ropivacaine. The patient was then positioned supine and an adductor canal block with 10mL of 0.25% Ropivacaine was performed. She received 4 boluses of Fentanyl 25mcg throughout the nerve blocks. Of note, the patient weighed 64 kilograms. Dilute local anesthetics were used to optimize post-operative analgesia rather than provide surgical anesthesia. The patient proceeded to the operative room and underwent general anesthesia with a laryngeal mask airway. She did not require additional opioids throughout the procedure. Patient informed consent was obtained for submission of a case report.



Results/Case Report

Upon arrival to the post-anesthesia care unit, the patient appeared comfortable but complained of 7/10 pain. She received 4 doses of IV Fentanyl 25mcg and oral Oxycodone 10mg, with a reduction in her pain to 2/10. Although the patient was planning on hospital admission for post-operative pain management, she stated her pain was much more manageable than after her previous ankle fusion and instead requested to go home. She was discharged home with an elastometric pump containing Ropivacaine 0.2% running at 8mL/hour through her popliteal nerve catheter. The patient did not respond to follow-up phone calls but was instructed to remove the peripheral nerve catheter on post-op day 3.

Discussion

Despite an iliac bone graft harvest being a relatively minor portion of joint fusion surgery, it can be the primary cause of post-operative and even chronic pain. TAP blocks can decrease this pain and even completely alter the post-operative disposition of patients, as seen by this case. Any patient undergoing a surgery that requires an iliac bone graft could benefit from a pre-operative TAP block.

REFERENCES

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