A pediatric presentation of ACNES

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INTRODUCTION

Anterior cutaneous nerve entrapment syndrome (ACNES) is an underrecognized cause of chronic abdominal wall pain resulting from entrapment of thoracoabdominal nerves within abdominal musculature.

Patients typically present with severe, focal pain exacerbated by sudden movements, prompting extensive evaluation for visceral pathology. Regional anesthesia may help localize pain initiated within the abdominal wall while providing temporary analgesia.2 We describe an adolescent with focal pain after laparoscopic appendectomy who experienced reproducible relief following ultrasound-guided transversus abdominis plane (TAP) blockade.

DISCUSSION

Rapid, reproducible analgesia after two TAP blocks supported an abdominal wall neuropathic pain generator. In the setting of focal tenderness and an otherwise unrevealing diagnostic evaluation, the clinical presentation was consistent with suspected ACNES.

This case also highlights barriers to definitive pediatric pain care in rural settings. The nearest pediatric pain center was more than 130 miles away, with an anticipated six-month wait, potentially prolonging morbidity and increasing the family's travel burden.



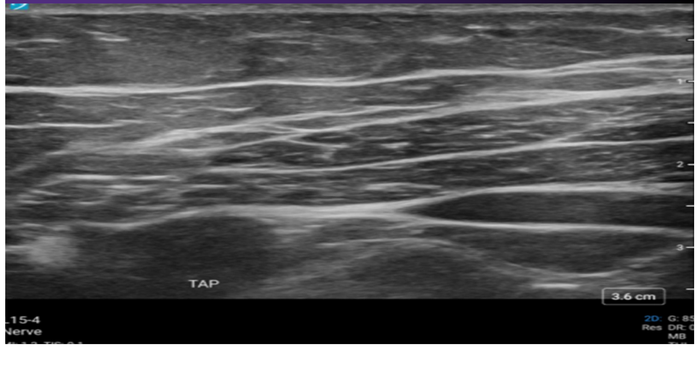
CASE REPORT

A 52 kg, 14-year-old female presented with severe left lower quadrant (LLQ) abdominal pain six months after laparoscopic appendectomy. Associated symptoms included headaches, syncope, nausea, vomiting, and left medial thigh pain. The patient was admitted for workup which consisted of a negative MRI and CT of abdomen and pelvis. Her C-reactive protein was elevated. The remaining laboratory studies were unremarkable. Examination demonstrated focal tenderness over a well -healed LLQ laparoscopic port site.

The regional anesthesia service was consulted for suspected abdominal wall neuropathic pain. An **ultrasound-guided TAP block** was performed with a 22- gauge needle to help narrow the diagnosis and provide potential analgesia**. The block consisted of ropivacaine 0.2% (20mL), epinephrine (50 mcg), and dexamethasone mg).** Dexamethasone and dexmedetomidine are well described off-label adjuvants in regional anesthesia literature. The patient felt relief within 30 minutes. The patient and her family were counseled that pain relief would be transient.

Six days later, recurrent pain prompted the administration of **a repeat TAP block using 0.25% bupivacaine, dexamethasone, epinephrine, and dexmedetomidine**. She reported substantial transient relief. She was referred to a pediatric pain specialist for consideration of longer-term interventions such as radiofrequency ablation, neurectomy, or neurolysis.

TRANSVERSUS ABDOMINIS



METHODS & MATERIALS

Per Health policy, this case report did not require IRB review because it contained no patient-identifiable information. Informed consent was obtained for publication of this case report.

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