From Pump Exchange to Septic Shock: A Case of Intrathecal Pain Pump Infection

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INTRODUCTION

Infection of an intrathecal pump is a rare complication with potentially devastating consequences, including meningitis. In this case report, we will discuss an instance of a recent intrathecal pump exchange becoming infected and leading to septic shock requiring pressors and intensive care and the steps taken to diagnose, stabilize, and resolve the infection.

RESULTS/CASE REPORT

This patient is a 68 year old female with a past medical history of chronic pain syndrome with contributing components of chronic back pain and ulcerative colitis with an intrathecal pain pump who presented to the emergency department with left sided abdominal pain that had been ongoing for two weeks, hypotension, fevers, and linear streaking across her abdomen necessitating pressors and ICU admission. Of note, this pump had been most recently replaced in a joint operation by neurosurgery and interventional pain one month prior. Early workup showed a nonspecific fluid collection and additional consults were placed to rule out alternative causes. Additional imaging showed the creation of a fistula tract between the device and the subcutaneous tissue. After ruling out alternative causes, the pump was explanted by the neurosurgery and interventional pain team. A retained piece of wiring was noted post operatively and the patient left against medical advice but returned shortly thereafter and the remaining foreign body was removed by interventional radiology without issue. The patient requested to not be discharged with any pain medications and is pending follow up in clinic.

DISCUSSION

Operative complications are an inevitability in any procedurally based specialty. In this case, we sought to highlight isolating the cause of a potentially multifactorial infection, taking the proper steps to stabilize the patient, obtaining source control in conjunction with other specialties, and dealing with subsequent takeback and the postoperative course.



< Figure 1: CT scan image showing placement of exchanged intrathecal pain pump



^ Figure 2: CT scan image showing post-surgical changes following explantation of intrathecal pain pump

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