



Successful Implantation of an Intrathecal Drug Delivery System in an Immunocompromised Patient: A Case Report

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Introduction

- Intrathecal drug delivery systems are becoming increasingly utilized for malignant and non-malignant chronic pain
- Intrathecal drug delivery systems are relatively safe and efficacious system with relatively few adverse effects.
- However, complications including infection are still a major concern.
- Careful consideration is needed prior to placement in patients who are immunocompromised and at high risk for infections, including patients with a history of cancer or transplantation.

Case Report

We present a case of a male in his 60s with chronic pain who underwent intrathecal pump placement after failing oral opioid therapy. The patient's medical history includes two organ transplants. The patient was on multiple immunosuppressant medications, including sirolimus, cyclosporine, and valacyclovir prophylaxis. The patient also had a remote history of VRE wound infection approximately 10 years prior. Therefore, an infectious disease specialist was consulted prior to pump placement, who recommended daptomycin prophylaxis perioperatively, with a ten-day course of Bactrim DS. His transplant team deemed it high risk from a healing standpoint. Sirolimus was held, cyclosporine dose adjusted upwards, and mycophenolic acid was restarted. With these interventions, ultimately the patient tolerated the procedure well with no immediate post-implantation complication. His wound healed well.

Discussion

Our case report demonstrates that intrathecal drug delivery system implantation can successfully be considered in immunocompromised patients with a history of transplantation. Care should be coordinated closely with an infectious disease specialist and the patient's transplant team to manage antimicrobial prophylaxis and immunosuppressive medications accordingly.

References

