



Perioperative planning for chronic inflammatory demyelinating polyneuropathy (CIDP) in the ambulatory surgical setting

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Introduction	Discussion	Anesthetic plan:	Conclusion
- Chronic inflammatory demyelinating polyneuropathy (CIDP) is an autoimmune neuropathy characterized by motor weakness and sensory changes. Traditional post-operative pain management with regional anesthesia may exacerbate neurological symptoms. - We present a case where precautions were taken to avoid exacerbating factors for CIDP, while still leaving the option for regional analgesia in a rescue setting.	- Anesthetic management is challenging due to concerns for exacerbating neurologic symptoms, unpredictable response to neuromuscular blockade, and neurotoxicity of local anesthetic agents. Delayed recovery from neuraxial or peripheral nerve blocks, muscle relaxants, and prolonged mechanical ventilation are also worrisome.¹ - Conversely, some prefer regional techniques and avoid general anesthesia citing unpredictable neuromuscular responses.² - Although the literature includes reports of using regional anesthesia with or without general anesthesia, a combination of multiple techniques, and avoidance of neuromuscular blockers, a strong emphasis is placed on coordination amongst providers and counseling of the patient.^{3,4} - In our patient, without clear guidelines and given CIDP's rarity, patient centered discussions led to a general anesthetic approach which mitigated the patient's concerns for disease exacerbation and simultaneously addressed concerns for potentially uncontrolled-pain.	- General anesthesia with LMA - Multimodal pain control with: - Diazepam, Ketamine, Hydromorphone, Ketorolac, Oxycodone, Dexmedetomidine, Acetaminophen Rescue plan: Interscalene nerve block post-operatively Figure 1. Primary and rescue anesthetic plan for a CIDP patient	- This case highlights the importance of patient centered care and perioperative planning in the setting of a rare disease and unclear guidelines for best anesthetic practices. - The individualized treatment plan ensured precautions were taken to avoid exacerbating factors for CIDP whilst allowing for quality-of-life improving surgery. - Preparing for regional anesthesia in a rescue setting, after thorough discussion of potential risks, allowed the patient to proceed with the operation and have multiple options for pain control. - This serves as a possible standardized plan for other CDIP patients undergoing ambulatory surgeries that have regional/neuraxial anesthesia protocolized
Clinical Case Summary			
A 64-year-old male (BMI 29.8) with CIDP presented for elective ambulatory rotator cuff repair. - His CIDP was diagnosed 15 years ago, which manifested as progressive lower extremity weakness - His CIDP medications included steroids and IVIG for acute flares, and was chronically maintained on gabapentin - The patient had previously undergone a TKA 3 years prior where spinal anesthesia, regional anesthesia, and neuromuscular blockade were completely avoided - He was screened and evaluated by the Center for Perioperative Medicine and discussion was held regarding the risks of regional anesthesia in the setting of CIDP - On the day of surgery, a plan was created amongst the patient, anesthesiology, and surgery team to perform the surgery under general anesthesia with a multimodal pain regimen - Regional anesthesia was reserved as a rescue treatment in the setting of uncontrolled post-surgical pain - The procedure was uneventful, and the patient was discharged the same day - The patient had no worsening of neurological symptoms or exacerbation of CIDP at follow-up visit			
Lessons Learned			
	- For patients with CIDP undergoing anesthesia, thorough discussion of anesthetic options allows for an individualized treatment approach that minimizes disease exacerbation and prepares for adequate pain control - Collaboration between the patient, surgeon, and anesthesiologist is necessary to prevent long-term harm and provide best outcomes		
References			
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