

[SP-242] An Unusual Presentation of Restless Leg Syndrome and Treatment

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Introduction

Restless leg syndrome is a neurological disorder that can result in an uncontrollable, and sometimes overwhelming urge to move one's legs that can be accompanied by unpleasant sensations, including pain. Here we present a case of possible acute restless leg syndrome that was treated with intravenous flumazenil.

Case Presentation

This is the case of an 11 year-old girl with no medical history except for agitation to hydrocodone who presented for a closed reduction and casting of left radius. The patient had an uneventful intraoperative anesthetic during an appendectomy one year prior. However, at home the patient had experienced some agitation, which included screaming in the middle of the night, after taking oral hydrocodone for pain. For the current surgery, the patient had adequate NPO and was given oral syrup midazolam 15mg premedication 30 minutes before surgery. Inhalation induction with nitrous oxide, sevoflurane, and oxygen was given by mask and a 22 gauge was inserted. One dose of propofol 50mg was given intravenously, and the procedure begun and maintained with mask inhalational anesthesia with air, oxygen and sevoflurane. After completion of the procedure, the patient was transferred to the recovery room with normal vital signs. Fentanyl 25mcg was given intravenously after 5 minutes in the recovery room, because the patient seemed restless. After fifty minutes in the recovery room the patient had normal vital signs, was awake, alert and did not complain of pain and was ready for discharge. At fifty five minutes after arriving in the recovery room, the patient started exhibiting abnormal behavior. She was screaming in pain, not able to keep still and was moving her legs in an uncontrolled fashion. Diphenhydramine IV 12.5mg was given twice, 15 minutes apart without effect. Dexamethasone IV 6mg was then given, also without effect. Naloxone IV 0.2mg was tried next, but the patient was still kicking her legs and screaming. Diazepam IV 1mg was also given and the patient started to scream louder and move and kick her legs even more vigorously. We then tried 0.1mg of flumazenil and the patient started to calm down a bit. After 15 minutes we gave another dose of 0.05mg of flumazenil and the patient returned to her baseline condition. The patient was admitted overnight for observation and the floor nurses were instructed to give a dose of flumazenil if the symptoms were to start again. The patient received one dose of flumazenil that evening when she started to complain of pain in her legs. She was at her baseline condition in the morning and was discharged home without ill effect. Upon discharge, the patient's mother stated that her father has a history of diagnosed restless leg syndrome.

Conclusion

As much as 10% of the population in the US may have restless leg syndrome. The peri-operative setting may exacerbate restless leg syndrome through immobilization, sleep deprivation, blood loss, and use of antihistamines and neuroleptics. Known treatments for this disorder include dopamine agonists, benzodiazepines, opiates, magnesium, clonidine, gabapentin, amantadine, carbamazepine and ketamine. This is the first report of treatment of an episode of acute restless leg syndrome with flumazenil.
