JFK Johnson Rehabilitation Institute

Transient Alteration of Consciousness in Spinal Cord Injury Secondary to Baclofen Use: A Case Report

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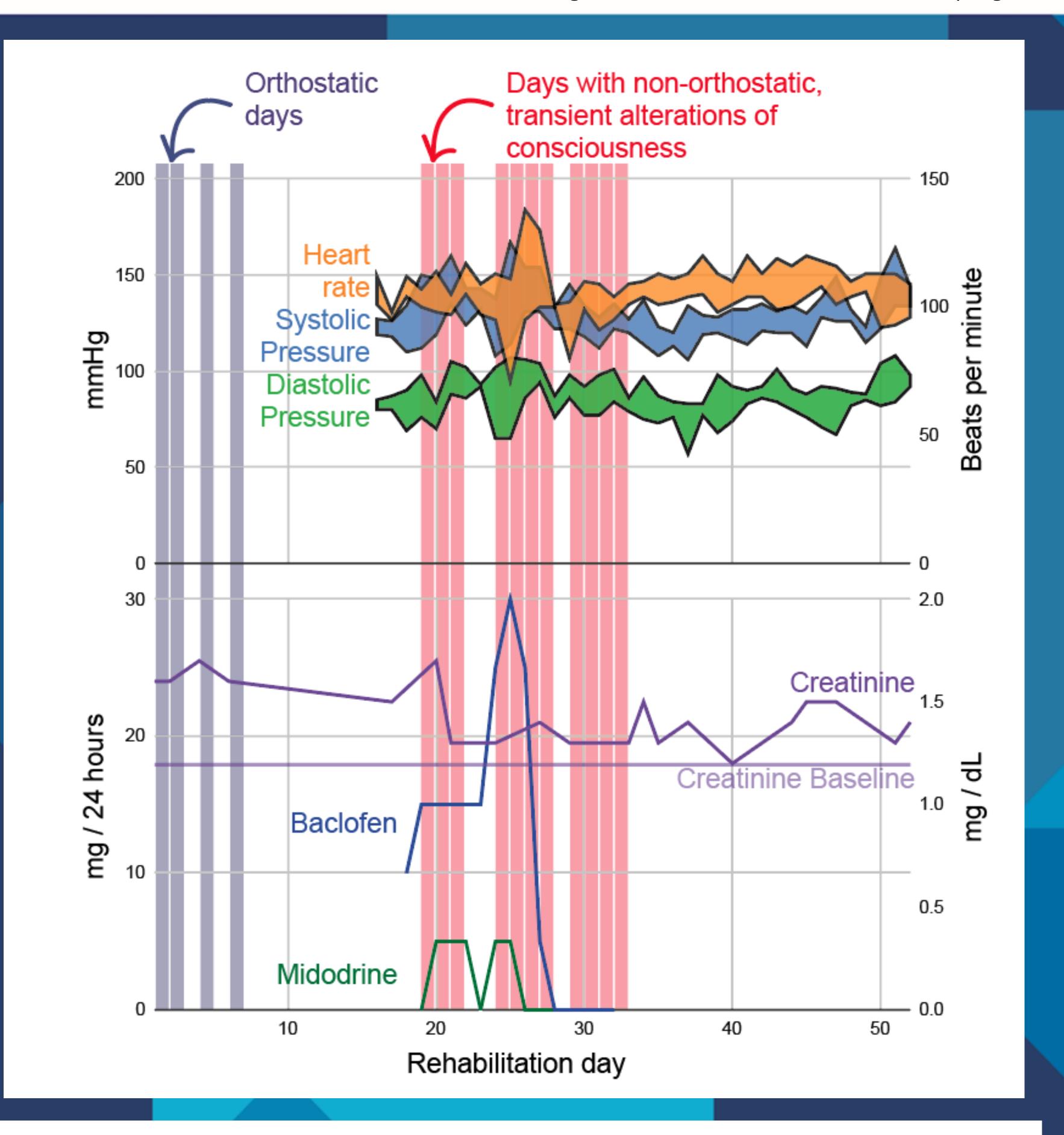


INTRODUCTION

Oral baclofen is commonly used for spasticity management, especially with neurogenic bladder in spinal cord injury (SCI). Significant patient variation exists in baclofen absorption, excretion, and dosage requirements for achieving desired effects. A potential side effect of baclofen is transient alterations of consciousness, which can easily be confused for altered mental status secondary to orthostatic hypotension in SCI.

CASE DESCRIPTION

43-year-old male with a past medical history of HIV, noncompliant with his medications and active polysubstance abuse including cocaine, presented to a local hospital with acute chest pain, found to have an aortic dissection. Emergent repair was performed with graft placement. Complications of his aortic dissection included a spinal cord infarct resulting in incomplete paraplegia. He developed acute kidney injury (AKI) during his hospitalization. He was eventually discharged to a comprehensive inpatient acute rehabilitation facility and started on baclofen for spasticity.



Laboratory values during rehabilitation. Values are plotted during inpatient rehabilitation. Upper and lower bounds of daily heart rate, systolic and diastolic blood pressure are plotted. Days with at least one episode of non-orthostatic, transient alteration of consciousness and separately days with orthostasis are shown. The patient was never found to be hypothermic (not shown).

RESULTS

The patient experienced episodes of confusion after titrating oral baclofen from 5mg TID to 10mg TID. Orthostatic hypotension was initially suspected as the cause of transient alterations of consciousness; however, he was never found to be hypotensive during these episodes. Cardiac and neurologic diagnostics were performed to further rule out syncope as the source of these episodes. However his echo was unchanged and CT head showed no evidence of mass, intracranial hemorrhage, or hydrocephalus His confusion resolved several days after the discontinuation of baclofen. When interviewed several months after discharge, he had not had any further episodes of confusion since his baclofen was discontinued.

DISCUSSION

Although confusion and lightheadedness in SCI are commonly caused by orthostatic hypotension, it is important for physicians to be cognizant of baclofen's side effects, which increase in the setting of acute kidney injury (AKI). If an adverse effect is suspected, baclofen should be tapered while remaining observant for signs of baclofen withdrawal, which can be life-threatening.

CONCLUSION

This case report is a reminder for clinicians to be aware of the uncommon adverse effects of baclofen when initiating therapy in SCI, especially neurogenic bladders. If a patient is suspected for baclofen side effects, baclofen should be tapered. Abrupt baclofen discontinuation risks life-threatening withdrawal.

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