Altered Mental Status Secondary to Clonidine Addiction and Withdrawal: A Cautionary Tale

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Background

- Altered mental status (AMS) is a nonspecific change in the baseline level of awareness, cognition, attention, or consciousness (LaHue, 2022).
- Clonidine is a sedative, and antihypertensive medication that has abuse potential and can be life-threatening in the case of overdose or withdrawal.
- We present a case of a patient with polysubstance dependence who presented with AMS with an unclear etiology and was ultimately found to be in clonidine withdrawal.

Case Presentation

- A 50-year-old male, with a past psychiatric history of substance use disorder (benzodiazepines and opioids) in remission, obsessive-compulsive disorder, and attention-deficit/hyperactivity disorder, presented to the emergency department with a 1-day history of disorientation, slurred speech, word-finding difficulty, and AMS. The patient’s history was notable for being prescribed clonidine and olanzapine off-label for insomnia.
- He was found to be hyponatremic to 121 mmol/L, was tachycardic to 125 beats per minute, and hypertensive to 181/115 mmHg upon initial assessment.
- Multiple medical specialties were consulted, including toxicology, neurology, infectious disease, and consultation liaison psychiatry.
- Initially, the concern was for a possible overdose of clonidine and olanzapine. The differential diagnoses included alcohol, benzodiazepine, and/or other substance intoxication vs withdrawal, as well as concern for possible infection.
- The patient was placed on a lorazepam taper, however his mental status and clinical picture worsened with further agitation, tachypnea, fever, tachycardia, hypertension, and myoclonus.
- A lumbar puncture was performed and was negative for any infectious etiology. Imaging including a CT head and CT abdomen/pelvis were unrevealing. He was ultimately transferred to the intensive care unit and placed on a dexmedetomidine drip. He had steady improvement while on dexmedetomidine.

Discussion

- Clonidine is a commonly prescribed medication with various indications that has abuse potential (Mitchell 2021).
- Clonidine withdrawal can lead to a catecholamine surge resulting in hypertensive crisis (Shaw 2015).
- Although he had a history of multiple substance use disorders, his history of clonidine use was a clue to the cause of worsening symptoms, as he had worsening AMS despite supportive care, avoiding the usage of antipsychotic medication, and using lorazepam for agitation.
- Treatment of clonidine withdrawal with dexmedetomidine proved to be efficacious due to its structural and functional similarities to clonidine.

Conclusion

- Our case highlights the importance of understanding the multiple etiologies of AMS, including drug intoxication and withdrawal, particularly with commonly prescribed medications.
- Clonidine has abuse potential, and clonidine withdrawal must be considered in the differential diagnosis in a patient with hypertensive crisis and AMS who is being prescribed clonidine.

References