ImPRESsive Admission for Polysubstance Withdrawal: A Case Report

- Pranaya Pakala (ECU Brody SOM) < pakala.pranaya@gmail.com >
- Michael Olejniczak (LSUHSC) < molejn@lsuhsc.edu >
- Hassan Malik (LSUHSC) < hmali1@lsuhsc.edu >
- Joshua Cooper (LSUHSC) < jcoo12@lsuhsc.edu >
- Lucas Glisson (LSUHSC) < lgliss@lsuhsc.edu >
- Seema Walvekar (LSUHSC) < swalve@lsuhsc.edu >

Case Presentation

A 58-year-old male with a past medical history of polysubstance use disorder, hypertension, and hyperthyroidism presented via EMS for new onset seizures and altered mental status. The patient was unable to provide a history, so collateral was obtained from his wife. She found him in bed having a tonic-clonic seizure while holding an empty pill bottle with an unknown white powder. He had AMS and an episode of urinary incontinence. The seizures lasted 5-7 minutes. He had no history of seizure disorder or recent illness, and his wife had never seen him having a seizure before. On route to the ED, the patient was GCS 7 and received Versed after having another seizure. He arrived at the ED stable, where he was given Subutex, aspirin loading dose, and IV Keppra. In the ED, he developed diaphoresis, lacrimation, rhinorrhea, anxiety, hypertension, and tachycardia related to withdrawal symptoms. The patient had struggled with drug abuse with fentanyl and heroin since 2019 and had presumably been attending a methadone clinic. The patient's wife did not have any knowledge of relapse episodes or withdrawal symptoms. It was later discovered that the patient was abusing heroin and fentanyl without his wife's knowledge. The patient was admitted to the internal medicine floor and treated for opioid withdrawal symptoms with a clonidine taper. On physical exam, he was in severe distress, appeared confused, and was diaphoretic and shivering. Increased work of breathing was noted on 3 liters NC at an SpO2 of 100% without any accessory muscle use. There were no visible track marks on his skin, and he had palpable pulses. He was moving all extremities spontaneously and had no other neurologic deficits. Head CT without contrast showed no acute abnormalities. Urine toxicology was positive for fentanyl. Over the following 2 days he showed improvement in withdrawal symptoms and improved mental status. He was oriented to self and speaking in sentences. However, he remained unoriented to place, time, and people, and had a new onset of perseveration and confabulation. Of note, he had developed new right gaze preference with right hemineglect and left upper and lower extremity weakness with ⅘ strength. He also was not showing evidence of intact visual acuity and ocular movement. As these were new neurological changes, a code stroke was activated. CT head showed new findings of cerebral edema more prominent on the right side than the left. MRI brain showed findings consistent with PRES, with prominent subcortical white matter edema predominantly involving bilateral posterior parietal and occipital lobes. The patient was admitted to the ICU for more acute monitoring of blood pressure with IV antihypertensives. EEG showed a diffuse encephalopathic pattern without seizure activity. The patient showed tremendous improvement in terms of mental status and strength. On discharge, the patient still showed slight hemineglect but had improved upper and lower extremity strength, improved vision, and was oriented to person, place, time, and events leading up to admission.

Discussion

- The symptoms of PRES can present within hours or days. A daily physical exam with thorough neurologic exam allowed for identification of subtle neurological changes even though the patient seemed to be improving overall. Therefore, even with limited evidence, anchoring should still be avoided in order to holistically diagnose patients based on new/developing symptoms.

- This case presents the importance of unbiased development of a differential diagnosis, daily physical exams, and preventing oneself from anchoring.