A Rare Case of Complicated Opioid Withdrawal in Delirium Without Convulsions

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ABSTRACT

Opioids are one of the commonly abused substances in India. Opioid withdrawal symptoms classically include severe muscle cramps, bone aches, autonomic symptoms, anxiety, restlessness, insomnia, and temperature dysregulation. However, reports of cases with delirium during withdrawal are few. A 25-year-old male with severe opioid withdrawal symptoms developed delirium. Investigations were normal. There were no comorbidities, no significant past history and family history. Patient treated for opioid dependence with tapering doses of lorazepam and clonidine. He was discharged with naltrexone. Patient lapsed 3 months later with similar presentation. Complications such as convulsions and delirium are recognized in alcohol withdrawal. However, these are rare as a feature of opioid withdrawal. This case illustrates the need for psychiatrists and physicians to be aware of the possibilities of delirium with opioid withdrawal and monitoring for the same is important because of its complications.

Key words: Delirium, opioid withdrawal, opioid withdrawal delirium

INTRODUCTION

Opioid withdrawal symptoms classically include severe muscle cramps, bone aches, autonomic symptoms, anxiety, restlessness, insomnia, and temperature dysregulation. Patients seldom have other complications unless they have comorbid medical illnesses. Complications such as convulsions and delirium are recognized in alcohol withdrawal. However, these are rare as a feature of opioid withdrawal. We hereby report a case of opioid withdrawal delirium.

CASE REPORT

A 25-year-old married man, graduate from urban background belonging to middle socioeconomic status, was brought to the emergency with family members at night with history of irritability, agitation, talking irrelevantly, fleeting episodes of not recognizing family members, hearing voices, seeing far off relatives with decreased sleep since 2 days, and passing loose stools.

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stools 5 times per day for the past 1 week. On examination, the patient was oriented to time, place, and person. Patient had dilated pupils, generalized tremulousness, severe abdominal cramps, sweating, rhinorrhea, piloerection, and tachycardia. Patient was admitted. He was willing to undergo detoxification and de-addiction. In the ward, patient became delirious. History revealed opioid use in dependence pattern since 2 years. He was initially consuming codeine syrup about 300–400 ml/day. Later, from last 8 months was using 300–400 mg of heroin per day in the form of inhalation of vapors from opium heated on an aluminum foil. Last use was 1 week back. Patient was also nicotine dependent with the use of one pack of cigarettes per day. Last use 1-day prior admission. Patient had also reported the use of cannabis on two occasions 8 months back; cocaine and amphetamines on three occasions 3 months back, and alcohol use in social gatherings not in dependence pattern. There was no history of any fever, head injury, and seizures. There was no history of any other substance use. There was no past history of any psychiatric, neurological illness, or family history of substance use. All the laboratory investigations such as complete blood count, liver function tests, serum electrolytes, blood glucose, and kidney-function tests were done which were normal; except elevated total count and neutrophilia. Repeat total count and differential count were sent which was found to be normal. Urine drug screen was negative for cannabis, amphetamines, morphine, and benzodiazepines. Electrocardiography and chest X-ray were within normal limits. Venereal disease research laboratory (VDRL) was positive. Treponema pallidum hemagglutination assay (TPHA) was negative. Hence, a diagnosis of mental and behavioral disorders due to the use of opioids; dependence syndrome withdrawal state complicated with delirium was made.

Patient required sedation for agitation and psychotic symptoms with haloperidol 5 mg, lorazepam 4 mg, clonidine 0.1 mg, and diazepam 15 mg before patient went to sleep. He was also given hyoscine for spasmodic abdominal pain. Later was started on 0.05 mg of clonidine three times per day and lorazepam 8 mg in divided doses which was gradually tapered off over a period of 7 days. Patient was given motivational enhancement therapy and family members were counseled. He was finally discharged on 50 mg of naltrexone.

Patient following discharge had lapsed 3 times and was readmitted with similar presentation. History revealed the use of heroin about 0.5 g 1 week back and marijuana 2 puffs with friends on the day of admission. Clonidine was stopped as urine drug screening was positive only for marijuana. All the laboratory investigations were normal; except total count which was 16770. Repeat total count and differential count were found to be normal. Treated with diazepam 30 mg and gradually tapered off. Patient improved symptomatically.

**DISCUSSION**

Usually, substances with short durations of action tend to produce short, intense withdrawal syndromes and substances with long durations of action produce prolonged, but mild, withdrawal syndromes.[1] In our case, we could not find any other reason for delirium. Here, the delirium presented without convulsions after 7 days of abstinence. Repeat total counts and differential counts were normal. No sepsis or fever recorded. VDRL came positive which could be false positive as TPHA was negative.

Complications such as convulsions and delirium are rare as a feature of opioid withdrawal.[2] There is a dearth of literature on the subject. Parkar et al. [2] reported four cases and Aggarwal et al.[3] reported one case of opioid withdrawal delirium. In a comparative study on 136 opioid abusers in India and Nepal by Aich et al.[4] 5 cases of opioid withdrawal delirium in Ranchi centre, and 2 cases of opioid withdrawal delirium at Nepal centre were reported after ruling out all other possible causes of delirium, especially alcohol withdrawal delirium.

One of the limitations of this case report was that we did not do a blood alcohol level which could have ruled out alcohol use. However, the signs and symptoms, with which the patient presented, and history given by patient and family suggest otherwise. Possible reason for drug urine test to show morphine negative could be due to the fact that the urine drug screen is a qualitative immunoassay. It screens morphine in urine at cutoff of 300 ng/ml. Heroin is rapidly broken down first to mono-acetyl-morphine, which is then metabolized to morphine in the body. About 67–70% of metabolite (morphine-3-glucuronide) is excreted in 48 h. Confirmatory tests include gas chromatography/mass spectrometry[5] which we were not able to do. Hair sample testing for opioid was also not done due to logistics.

**CONCLUSIONS**

This case is unique in terms of presenting with delirium without convulsions after 7 days of abstinence. No associated comorbidities, organic causes, and other substance use in dependence pattern or recently used. Use of a street variety (mixed with impurities) could be a risk factor for delirium in our patient. Contaminants were
not assessed due to logistics. Study with large sample size for conclusive study and to determine risk factors is required. Psychiatrist and physicians need to be aware of complication and carefully monitor opioid dependence.

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**Conflicts of interest**
There are no conflicts of interest.

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