A Case of Acute Psychosis After Buprenorphine Withdrawal: Abrupt Versus Progressive Discontinuation Could Make a Difference

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Buprenorphine, a partial μ-opioid agonist and κ-opioid antagonist, is frequently used in the treatment of heroin dependence and to prevent complications arising from intravenous injection and social consequences of heroin use. Psychosis occurring after discontinuation of buprenorphine or other opioids has been described, but is uncommon.[1,2]

Case report. Mr A, a 37-year-old man, was admitted to our psychiatric ward for acute psychotic symptoms with mystical and paranoid delusions and intense auditory hallucinations. Before hospitalization, while very anxious, he had attempted suicide by trying to cause a gas explosion but luckily was only superficially burned. The symptoms began 2 weeks after he abruptly discontinued buprenorphine, which he had taken for 2 years as substitution therapy for heroin dependence at a dose of 8 mg/d. Although he had no family psychiatric history, he was hospitalized 3 years ago for acute and transient visual hallucinations due to lysergic acid diethylamide use. At admission, he was still regularly taking marijuana and using intranasal heroin on a weekly basis.

The current symptoms were assessed with the Psychotic Symptom Rating Scales[3] auditory hallucinations subscale (AHS = 36; maximum = 44) and delusions subscale (DS = 21; maximum = 24).

Mr A was treated with risperidone, up to a dose of 8 mg/d. He refused the reintroduction of buprenorphine. The hallucinations decreased rapidly, but the patient remained anxious, and the delusions were still persistent (AHS = 0; DS = 15) 4 weeks after beginning risperidone.

Buprenorphine was finally restarted at 8 mg/d, which allowed a complete remission of psychotic and anxiety-related symptoms (AHS = 0; DS = 5). Mr A was released from the hospital 5 days after the observed remission, initially under close medical supervision. Two months later, we decided to gradually discontinue risperidone and to stop buprenorphine very slowly (over 4 months). This approach allowed the patient to remain symptom-free 18 months later, while he continues to use marijuana on a daily basis.

There are several interesting features of this case report that suggest that abrupt withdrawal syndrome could have induced the psychotic symptoms. First, it is worth noting that the 2-week delay between discontinuation of buprenorphine and the onset of psychotic symptoms could be explained by the medication's long half-life (40 hours). Moreover, this is the second report of psychosis after buprenorphine withdrawal,[1] notwithstanding the longer symptomatic duration in this case. Additionally, marijuana use cannot explain the psychotic symptoms: although these psychotic symptoms initially occurred during regular cannabis use, they persisted in spite of cannabis withdrawal during the hospital stay, and, once suppressed after reintroduction of buprenorphine, they did not recur after hospitalization when the patient restarted his regular use of marijuana.

An interesting issue in our case report is that a correctly conducted antipsychotic treatment did not succeed in stopping symptoms of delusions, even after 4 weeks, while reintroducing buprenorphine did. Karila et al[1] made the same observation, but they did not test the efficacy of treatment by antipsychotics alone.

Finally, the absence of relapse after the very progressive withdrawal of buprenorphine shows that its use probably did not hide a latent psychotic disorder. Mr A's history of substance-induced psychosis suggests a vulnerability to psychotic disorders. Hence, we speculate that buprenorphine had an effective antipsychotic effect[4] and that its abrupt withdrawal in a patient vulnerable to substance-related psychosis induced the emergence of psychotic symptoms, maybe through a mechanism of hypersensitivity.[5]

This case report highlights the importance of taking opiate dependence into account in patients with recent onset of psychotic symptoms, even several weeks after withdrawal. In cases of opioid interruption, a psychotic vulnerability assessment must be made to avoid the emergence of acute psychotic symptoms, and abrupt opiate withdrawal should be avoided.

References

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Drug names: buprenorphine (Subutex and others).
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Submitted: November 16, 2011; accepted February 29, 2012.
Potential conflicts of interest: None reported.
Funding/support: None reported.
J Clin Psychiatry 2012;73(6):e756 (doi:10.4088/JCP.11cr07608)