Potentiation of the Effect of Buprenorphine/Naloxone With Gabapentin or Quetiapine

To the Editor: Although it is an effective treatment for opioid dependence, buprenorphine/naloxone may be misused. We report here a case of potentiation of buprenorphine/naloxone with gabapentin and quetiapine.

Case Report

"Mr. A," a 38-year-old man, began misusing heroin and prescription opioids in his late twenties. After being arrested for drug possession, he completed a treatment program and was placed on probation that stipulated periodic drug screens. He was prescribed buprenorphine (8 mg)/naloxone (2 mg), two films sublingually as a single daily dose. He initially appeared to do well. After presenting to his probation officer in an apparently intoxicated state, he was taken back into custody. His urine drug screen was negative.

Mr. A admitted he had been misusing buprenorphine/naloxone in conjunction with other prescription medications as a partial substitute for illicit opiates. He wanted to maintain negative drug screens but also "still get high." He described taking buprenorphine/naloxone simultaneously with up to 1,000 mg of quetiapine or with up to 2,400 mg of gabapentin. With buprenorphine/naloxone and either additional medication, he experienced a relaxed euphoric state that was not as intense as with illicit opiates but was still quite desirable. He entered another drug treatment program to address this problem.

Discussion

In a survey carried out in substance misuse clinics, 22% of respondents admitted abusing gabapentin or pregabalin, and of these, 38% abused gabapentanoids to potentiate the high obtained from methadone (1). The possible mechanism of action for the potentiation of an opiate high may be related to gabapentin's ability to increase the analgesic effect of opiates. Opiates act by bonding to opioid receptors, opening G protein-coupled potassium channels, and closing voltage-dependent calcium channels, thus preventing the release of excitatory amino acids in the spinal cord (2). Gabapentin selectively inhibits voltage-gated calcium channels, increases GABA transmission, and modulates excitatory amino acids at *N*-methyl-D-aspartic acid receptor sites (3). Thus opiates and gabapentin have certain shared mechanisms affecting analgesia. It has also been hypothesized that an increased analgesic effect of gabapentin and morphine may be contributed to by an increase in gabapentin serum concentration that results from the two medications being given together (2). Gabapentin has demonstrated usefulness in preventing opioid withdrawal, probably by modulating excitatory amino acids, which are increased during withdrawal (3). The interactions of quetiapine's effects on serotonergic, dopaminergic, and other receptor systems with opiate effects, and possibly nonopiate effects, are speculative.

Clinicians treating opiate-dependent individuals should be aware that some patients may attempt to covertly potentiate the effects of buprenorphine/naloxone by abusing drugs such as gabapentin or quetiapine.

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The Second-Oldest State Psychiatric Hospital in the United States

To the Editor: The "Images in Psychiatry" article by de Leon, et al. (1) in the February 2014 issue describes the Eastern State Hospital, Lexington, Ky., opened in 1824, as "the second-oldest state mental hospital in the United States," after the Eastern State Hospital in Williamsburg, Va., which opened in 1766. However, this statement ignores the Spring Grove Hospital Center in Catonsville, Md., which has been continuously operating since it opened in 1797. The hospital is affiliated with the University of Maryland Department of Psychiatry and houses the world-renowned Maryland Psychiatric Research Center (2, 3).

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Response to Gorelick

To the Editor: I am grateful that Dr. Gorelick brought to my attention the Spring Grove Center in Catonsville, Md., which claims to be the second-oldest state mental health hospital in the United States. I went to the web page he provided and found a very interesting and complicated