42-Year-Old Woman with History of Major Depressive Disorder, Schizoaffective Disorder

Yakir Vaks, MD; Ayme Frometa, MD; and Sree Latha Krishna Jadapalle, MD

This patient is a 42-year-old Hispanic, widowed, unemployed female with a past psychiatric history of major depressive disorder and schizoaffective disorder, depressed type for an unspecified number of years. She was transferred to our inpatient facility from an outpatient clinic where she was assessed and admitted to its ER for 1 day due to worsening psychotic symptoms and persistent suicidal and homicidal ideation.

At the outpatient clinic, the patient reported that she wanted to stab or strangle everyone but her “son.” She also reported hearing voices commanding her to kill herself, and experienced visual hallucinations of a man dressed in white telling her to kill herself. Before admission, the patient was living with her 16-year-old son. She moved to the US from Puerto Rico 2 years previously, had been unemployed for an unspecified amount of time, and was now living on welfare. One month before admission, the patient had a similar worsening of auditory hallucinations telling her to kill herself, and visual hallucinations. The patient had a suicide plan, which was to either cut or hang herself.

The patient reported previous psychiatric hospitalizations, a history of self-mutilation, and a suicide attempt by hanging 2 years ago in Puerto Rico. The rope was around the patient’s neck when she was rescued by her brother. She also has a history of assaultive behavior (damage to property, violence toward others) and alcohol/intravenous drug abuse. The patient denied any recent stressors or history of sexual/physical abuse. There was no family history of psychiatric illness. No medical problems were reported.

On exam, the patient appeared her stated age and well nourished, but was unkempt and disheveled. Scars were present on both wrists from previous suicide attempts. She was restless and displayed psychomotor agitation and underproductive speech. She reported hearing voices telling her to kill herself and had visual hallucinations of large snakes.

She denied suicidal or homicidal ideation at the time of interview. Although awake, the remainder of the mini-mental exam was deferred because of her inability to answer questions.

The patient was taking quetiapine, alprazolam, trazodone, zolpidem, cyclobenzaprine, and Percocet, and reported being compliant with them. The patient also reported taking Fioricet, which she had purchased online for her migraines.

After being medically cleared from the ER, she was sent to the acute adult care unit, where she experienced a severe dystonic episode and was transferred to the CCU. During the first dystonic episode, the patient was given quetiapine XR, 100 mg orally titrated to 300 mg; benztrapine mesylate, 1 mg orally; lorazepam, 1 mg titrated to 2 mg orally; and diphenhydramine, 50 mg orally. Subsequently, the quetiapine was discontinued and the patient...
returned to the acute adult care unit after being medically cleared.

After 1 week, she experienced a second dystonic episode and received chlorpromazine, 100 mg three times a day; phenobarbital, 30 mg, three times a day; benztpine mesylate, 1 mg; lorazepam, 1 mg titrated to 2 mg; and diphenhydramine. Zolpidem, 10 mg, was added later. Again, the patient was medically cleared and transferred to the intermediate adult care unit.

With the introduction of phenobarbital, her affect became more controlled and her suicidal and homicidal thoughts resolved. The patient was adherent with her medications and upon discharge clinically stable. She was scheduled for follow-up in our outpatient program.

**DISCUSSION**

In this patient, a possible drug-drug interaction was considered, given her ingestion of an extensive amount of psychiatric and non-psychiatric medications. In particular, we considered the barbiturate component of Fioricet, cyclobenzaprine, and Percocet as the possible cause for her deterioration and subsequent hospitalization.

Fioricet is a combination of acetylsalicylic acid, butalbital, caffeine, and codeine. Butalbital is an intermediate-acting barbiturate with CNS depressive activity. The most frequently reported adverse reactions are drowsiness, lightheadedness, dizziness, sedation, shortness of breath, nausea, vomiting, abdominal pain, and an intoxicated feeling. Patients can also present with hallucinations and delirium. Even when taken at therapeutic doses, butalbital can exacerbate insomnia and result in restlessness, disturbing dreams, frequent awakening, and feelings of tension in the early morning.

Barbiturate abuse was common in the 1960s and 1970s. With the introduction of benzodiazepines, with their fewer adverse effects and less addictive properties, the use of barbiturates as a first-line treatment waned.

Barbiturate withdrawal can mimic a wide spectrum of psychiatric symptoms and may be mistaken for various disease states. Thus, practitioners should be concerned with patients taking barbiturates and presenting with non-specific symptoms, such as anxiety, irritability, depression, seizures, and delirium. The barbiturate type (short- or intermediate-acting), dosage, and duration can provide a spectrum of symptoms ranging from minor effects (tremors, weakness, insomnia, sweating, and restlessness) to more severe symptoms (myoclonic muscle contractions, spasmodic jerking of extremities, and grand mal seizures). Urine toxicity screens can determine barbiturate presence.

Withdrawal from barbiturates taken in large doses can cause an abrupt, potentially life-threatening syndrome similar to delirium tremens. Occasionally, even after properly managed withdrawal over a 1- to 2-week period, seizures may occur.

Barbiturate withdrawal requires pharmacotherapy and admission to the hospital in patients who have taken more than 0.4 g/day of secobarbital or an equivalent amount of another barbiturate for 90 days or longer, or 0.6 g/day or an equivalent dose for 30 days or longer, or who have previously had withdrawal seizures or delirium. There are no standard FDA-approved treatment recommendations for barbiturate withdrawal.

There are three approaches to prevent or treat barbiturate withdrawal. The first is stabilization with an intermediate-acting barbiturate (eg, pentobarbital, 0.2 g to 0.4 g orally every 4 to 6 hours).

The second is phenobarbital without monitoring for clinical or toxic effects. These approaches have several disadvantages, including: uncertainty of dosage; reinforcement of drug-taking behavior through the repeated administration of barbiturates; difficulties in assessing the clinical state; uncertainty of supplementary doses; and drug-seeking by the patient.

The third method of treatment relies on loading doses of phenobarbital titrated to clinical or toxic effects. Doses of 120 mg are given every 1 to 2 hours until three of the following five signs are present: nystagmus; drowsiness; ataxia; dysarthria; and emotional lability. In symptomatic patients, the withdrawal signs and symptoms should disappear. This approach has a number of advantages. The phenobarbital dose required to reach
a safe, mild level of intoxication can indicate the actual extent of drug use, the severity of physical dependence on sedative drugs, and the likelihood of a severe withdrawal reaction if the patient is not treated adequately.6

The loading dose technique also decreases the manipulative drug-seeking behavior of patients. Because of its long half-life (approximately 4 days), phenobarbital provides more constant serum levels than shorter-acting barbiturates and also causes less euphoria. Once phenobarbital equivalents are established, stabilization on equivalent doses should be maintained for 2 days, after which a gradual withdrawal can be instituted at a rate of 30 mg per day.1

CONCLUSION

For patients with barbiturate withdrawal, pharmacotherapy and admission to the hospital is often required. Barbiturates should be taken only if prescribed and should never be taken combined with opiates, benzodiazepines, or alcohol because they can produce a variety of psychotic symptoms and serious complications. Despite their decreased use, clinicians need to be aware of the signs and symptoms of barbiturate withdrawal. The relevant literature points toward the loading dose approach as the best method of easing withdrawal symptoms. We recommend this approach as a standard treatment protocol to increase awareness and better management of potential cases.

REFERENCES