The First Published Case Report of an Adult Woman Who Developed Suicidal Ideation as an Adverse Event Related to Methylphenidate Use

To the Editor: Recent attention has been paid to suicidal ideation as an adverse event associated with drugs targeting the central nervous system.[1] We report the case of a patient with past history of major depressive disorder in remission for 5 months who attempted suicide shortly after beginning extended-release methylphenidate for untreated attention-deficit/hyperactivity disorder (ADHD). Although the methylphenidate package insert contains data regarding the risk of drug dependence, exacerbation of preexisting psychosis, aggression, and induction of manic/mixed episodes, the drug's label does not contain a warning regarding increased risk of suicidality.[2]

Case report. Ms A, a 24-year old white woman, was initially seen at our clinic for depression and anxiety related to family stress and was diagnosed with major depressive disorder (*DSM-IV-TR*). She was treated with citalopram (20 mg daily) and clonazepam (up to 1 mg at bedtime), and her depression was in remission for a period of 5 months before she complained of ongoing and lifelong inattention and poor concentration.

In February 2014, Ms A was diagnosed with ADHD, inattentive type (*DSM-IV-TR*) using the Adult ADHD Self-Report Scale and was prescribed extended-release methylphenidate at a dose of 18 mg/d. Six days after starting the medication, Ms A's mother reported that the patient had suddenly become hopeless and attempted suicide by shooting herself in the neck with a BB gun. Ms A was then admitted to the local psychiatric hospital for further evaluation.

During the hospitalization, Ms A reported that she began to feel "very down" and "negative" within days of starting the extended-release methylphenidate. She reported no new stressors, and there were no precipitating events noted. She was devoid of manic or psychotic symptoms at the time of admission and did not use alcohol or illicit drugs.

While in the hospital, Ms A did not meet criteria for a major depressive episode, and the extended-release methylphenidate was discontinued. She continued taking citalopram, and her depression was still in remission at her next clinic visit, and she was devoid of suicidal ideation.

Methylphenidate products do not contain package labeling regarding the development of suicidality during treatment. We searched the medical literature using *stimulants* AND *suicide* as search terms on September 18, 2014 and found 2 reported cases of suicidality associated with methylphenidate, both of which occurred in adolescent girls with depressive symptoms.

This report presents the first published case of suicidal ideation associated with methylphenidate in an adult female patient whose depression had been in remission for 5 months. The patient developed suicidality after taking 5 doses of extended-release methylphenidate in the absence of new life stressors or a relapse of her depression.

Prescription medications are not "one size fits all," and interindividual differences in neurobiology and metabolism can result in unique efficacy and safety issues. As we advance into the age of "personalized medicine," these interindividual differences may be better understood, which could lead to more precise medication choice based on the unique biological variants of individual patients.

References

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Matthew Macaluso, DO
mmacaluso@kumc.edu
Crystal A. Larson, DO

Author affiliations: Department of Psychiatry and Behavioral Sciences, Wichita, Kansas.
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