Letter to the editor

The risk of initiating fluoxetine for motor deficits after ischemic stroke in patients with bipolar disorder

Charles A. Whitmore[1]

[1] *University of Colorado School of Medicine.*

Institution where the study was conducted: Denver Veteran Affairs Medical Center
1055 Clermont Street, Denver, CO 80220

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Dear Editor,

In 2011, the fluoxetine for motor recovery after acute ischemic stroke (FLAME) trial described a significant improvement in motor deficits among patients who were prescribed fluoxetine while recovering from an ischemic stroke[1]. Following the publication of FLAME and similar trials[2,3], there is growing evidence that providers should consider prescribing a selective serotonin reuptake inhibitor for a patient who has experienced a stroke[4]. However, the psychiatric consequences or diagnostic contraindications of this therapy have not been discussed.

We examined the effects of initiating fluoxetine in a patient with bipolar 2 disorder following left posterior inferior cerebellar artery ischemic stroke. The patient's medical and psychiatric history, physical and neurological examinations, pertinent family history, social history, and laboratory data were used in our assessment and subsequent treatment of their condition. The patient's anonymity was maintained by withholding identifying information.

The patient was hospitalized for treatment of left posterior inferior cerebellar artery ischemic stroke roughly two weeks after stopping their home medications consisting of insulin, metoprolol, and lithium. While recovering from their stroke, the patient resumed taking metoprolol and insulin though refused lithium or another mood stabilizer. To treat residual symptoms of their ischemic stroke, fluoxetine 40 mg by mouth daily was initiated without a concurrent mood stabilizer. Soon thereafter, the patient developed symptoms concerning for hypomania: increased rate of speech, irritability, psychomotor agitation, tangential thought process, and reduced need for sleep. The patient's urine toxicology was negative for drugs of abuse, and aside from fluoxetine the patient had not been treated with medications associated with drug-induced mania. Though the patient refused medication to treat symptoms of hypomania, they agreed to discontinue fluoxetine. Over the course of multiple days, the patient's symptoms improved, and the patient did not require inpatient psychiatric treatment for acute stabilization.

We report that initiation of fluoxetine for motor recovery after ischemic stroke carries the risk of inducing hypomania in a patient with bipolar 2 disorder who is not taking a mood stabilizer. Fluoxetine is one of many medications that can induce symptoms of mania[5]. The risk of triggering medication-induced mania is heightened among patients with bipolar disorder[6-8]. Among patients with known bipolar disorder, treatment with an effective mood stabilizer or atypical antipsychotic is necessary prior to starting an antidepressant to mitigate the risk of triggering mania[9,10]. Providers should understand the benefits of conducting a psychiatric review of systems and appreciate the risks of prescribing fluoxetine following an ischemic stroke to patients with a history of bipolar disorder.

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Address for correspondence: Charles A. Whitmore. Department of Psychiatry, 13001 E 17th Pl., MS-F546, Bldg 500, Rm E2322, Aurora, CO 80045. Telephone: (303) 724-6021. Fax: (303) 724-4963.
E-mail: charles.whitmore@ucdenver.edu