Citalopram-Induced Seizures in a Healthy Adult Taking an FDA-Approved Dosage: A Case Report

To the Editor: A retrospective review of published literature disclosed case reports of seizures following citalopram overdose.[1] We present a case of citalopram-induced seizures in an otherwise healthy woman taking a US Food and Drug Administration (FDA)–approved dosage.

Case report. Ms A, a 50-year-old African American woman, had a past psychiatric history significant for major depressive disorder, no comorbid medical history, and no previously documented seizure disorder. She presented to the emergency department in October 2010 after 2 witnessed generalized tonic-clonic seizures, lasting 2 minutes each, on 2 consecutive days. She was confused upon presentation to the emergency department. Citalopram 20 mg po daily had been started 4 days prior to the first seizure. She had taken sertraline 50 mg po daily for a year, but had stopped taking that drug several years previously after depression did not improve. At the time of presentation, she had been taking gabapentin 300 mg po daily for Morton's neuroma. Past medical and surgical histories were not significant for any major illness. Family history was negative for seizure disorder, stroke, or myocardial infarct. She was an employed single mother of 6 children. She smoked half a pack of cigarettes daily, but there was no history of alcohol or illegal drug use. Physical and neurologic examinations revealed no abnormalities.

Ms A was admitted to the general medical floor for observation, which lasted for 4 days. Complete blood cell count, comprehensive metabolic panel findings, thyroid-stimulating hormone level, alcohol level, and urine drug screen findings were within normal limits. Findings of cranial computed tomography and magnetic resonance imaging, with and without contrast, were within normal limits. Electroencephalogram (EEG) also revealed no abnormalities, and no evidence of an epileptic focus was found. Upon Ms A's admission to the medical unit, citalopram was stopped; there were no further seizures during her stay in the hospital or in 1 month of follow-up.

To the best of our knowledge, there is no published case of seizures associated with short-term use of citalopram within the FDA-approved dosage range of 20 to 40 mg/d[2] in healthy adults. We were unable to identify any other cause of the seizures. Prolonged previous uneventful use of sertraline ruled out a general reaction to the selective serotonin reuptake inhibitor (SSRI) class. Citalopram evokes spontaneous EEG spikes in normal rats, and reduces paired-pulse inhibition in both normal and epileptic rats.[3]

To the best of our knowledge, this is the first report to document that citalopram may induce seizures at low doses, even in a patient who had tolerated another SSRI in the past. If practitioners recognize this association, expensive investigations and extensive hospital stays may be prevented, although prudent practice would very likely still require the type of investigations undertaken with our patient.

REFERENCES

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