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Atypical Intoxication Due to Fluoxetine Abuse with Symptoms of Amnesia

Authors: Ayse Gul Bilen

Abstract: Selective serotonin reuptake inhibitors (SSRIs) are commonly prescribed antidepressants that are used clinically for the treatment of anxiety disorders, obsessive-compulsive disorder (OCD), panic disorders and eating disorders. The first SSRI, fluoxetine (sold under the brand names Prozac and Sarafem among others), had an adverse effect profile better than any other available antidepressant when it was introduced because of its selectivity for serotonin receptors. They have been considered almost free of side effects and have become widely prescribed, however questions about the safety and tolerability of SSRIs have emerged with their continued use. Most SSRI side effects are dose-related and can be attributed to serotonergic effects such as nausea. Continuous use might trigger adverse effects such as hyponatremia, tremor, nausea, weight gain, sleep disturbance and sexual dysfunction. Moderate toxicity can be safely observed in the hospital for 24 hours, and mild cases can be safely discharged (if asymptomatic) from the emergency department once cleared by Psychiatry in cases of intentional overdose and after 6 to 8 hours of observation. Although fluoxetine is relatively safe in terms of overdose, it might still be cardiotoxic and inhibit platelet secretion, aggregation, and plug formation. There have been reported clinical cases of seizures, cardiac conduction abnormalities, and even fatalities associated with fluoxetine ingestions. While the medical literature strongly suggests that most fluoxetine overdoses are benign, emergency physicians need to remain cognizant that intentional, high-dose fluoxetine ingestions may induce seizures and can even be fatal due to cardiac arrhythmia. Our case is a 35-year old female patient who was sent to ER with symptoms of confusion, amnesia and loss of orientation for time and location after being found wandering in the streets unconsciously by police forces that informed 112. Upon laboratory examination, no pathological symptom was found except sinus tachycardia in the EKG and high levels of aspartate transaminase (AST) and alanine transaminase (ALT). Diffusion MRI and computed tomography (CT) of the brain all looked normal. Upon physical and sexual examination, no signs of abuse or trauma were found. Test results for narcotics, stimulants and alcohol were negative as well. There was a presence of dysrhythmia which required admission to the intensive care unit (ICU). The patient gained back her conscience after 24 hours. It was discovered from her story afterward that she had been using fluoxetine due to posttraumatic stress disorder (PTSD) for 6 months and that she had attempted suicide after taking 3 boxes of fluoxetine due to the loss of a parent. She was then transferred to the psychiatric clinic. Our study aims to highlight the need to consider toxicologic drug use, in particular, the abuse of selective serotonin reuptake inhibitors (SSRIs), which have been widely prescribed due to presumed safety and tolerability, for diagnosis of patients applying to the emergency room (ER).

Keywords: abuse, amnesia, fluoxetine, intoxication, SSRI

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