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Short Report

A case of fluoxetine-induced stimulant side effects with suicidal ideation associated with a possible withdrawal reaction ("crashing")

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Introduction

A number of reports have suggested an association between fluoxetine and suicidal behavior [1,2]. Fluoxetine is known to sometimes produce a stimulant profile of side effects, including an energizing effect, insomnia, nervousness or anxiety, and anorexia with weight loss. This is a report of suicidal ideation associated with stimulant effects and a subsequent "crash" during fluoxetine treatment.

Case Report

Mrs. A, a 19-year-old Hispanic woman, went into couples counseling for marital problems, and then became depressed as she uncovered more about her physically and sexually abusive childhood. Her counselor referred her to a psychiatrist who prescribed fluoxetine 20 mg QD AM. Within two or three days after starting fluoxetine she became "energized" and couldn't sleep at night. She could not read or watch TV but felt a compulsive need to socialize or to do housework and other chores. Friends noticed that she would become "silly" and "outgoing" at night, while remaining shy during the day. She began to feel "I have to have my Prozac. I can't do without it." When out of town, she ran out of fluoxetine and became "frantic to get it." She did not, however, increase the dose on her own. When she accidentally skipped her medication on occasion, coworkers noticed a drop in her

energy and asked if she'd taken her medication. During this time her depression was only partially relieved.

Three weeks after starting fluoxetine, lasting for about a week, she began experiencing hour-long episodes, sometimes several a day, of "getting scared as if someone's coming to get me." She felt as if "everyone was staring at me in the street." Her hands and feet would shake, and she had an "inner shaking" as well. She did not experience a compulsion to move about or stay in motion.

After four weeks, the "energizing" effect wore off, and she "crashed," becoming "exhausted" and further depressed. Her psychiatrist increased her medication to 40 mg qd AM. This time she felt no energizing effect and remained depressed. Ten days after the increase in dose, she abruptly "crashed" again one night with the sudden, unexpected onset of exhaustion and suicidal feelings. There were no precipitating events. She began to "look at people and couldn't focus on them, like they were images" rather than real. She felt as if her depression would never end and that, since the medication had failed, she was hopeless. She felt "very exhausted" and for the first time began to fall asleep at work. She imagined her funeral and contemplated using fluoxetine to overdose. After two days of intense suicidal preoccupation, she was hospitalized and all medication stopped. At this point she noticed a weight loss from 114 lbs to 104. She refused lithium and in a few days her suicidal preoccupations ceased, she gained weight, and was discharged after eight days. She gradually improved over several months without further counseling or medication. In retrospect, she attributed her progress to a better understanding of her right to be angry at her abusive parents, as well as improvement in her marital problems.

The patient had one prior suicide attempt at the age of fourteen by ingesting "pain killers." She had been "depressed" much of her teens as a result of child abuse and the death of her mother. There were no other suicidal periods. She had no history of drug abuse and had never used stimulant drugs.

Discussion

The case illustrates a stimulant profile of side effects from fluoxetine characterized by an energizing effect, insomnia, anxiety, and weight loss. It also illustrates episodes of anxiety with paranoid ideation which can also be associated with stimulants. The patient also felt driven to take the medication and acted as if she were becoming dependent upon it. Finally, the patient suffered apparently increasing tolerance to the medication's stimulant effects, producing a withdrawal reaction ("crashed") twice while being maintained on constant dose levels. The suicidal ideation was abrupt in onset and was associated with a feeling of "crashing."

An extensive literature now exists suggesting an association between compulsive, destructive ideation and behavior (such as suicide and murder) and sluggish serotonergic neurotransmission [3,4]. In this regard, it is important to note that agents which block the reuptake of serotonin, such as fluoxetine, can also produce compensatory *reductions* in serotonergic nerve transmission. One mechanism, a

compensatory shutdown of serotonergic neurotransmission, becomes activated immediately after the first daily dose [5]. During medication at a constant level, there is a gradual return to normal levels of serotonergic activity within three weeks [6]. Another mechanism is down regulation with a decrease in the density of serotonin receptors [7]. Down regulation can occur after lengthy exposure to reuptake blockers; but its extent is not fully understood. The case of Mrs. A does not permit any conclusions concerning the relationship between "crashing" and a compensatory shutdown or down regulation of serotonergic neurotransmission.

References

- 1 Teicher MH, Glod C, Cole JO. Emergence of intense suicidal preoccupation during fluoxetine treatment. *Am J Psychiatry* 1990;147:207-210.
- 2 Dasgupta K. Additional cases of suicidal ideation associated with fluoxetine. *Am J Psychiatry* 1990;147:1570.
- 3 Brown GL, Linnoila MI. CSF serotonin metabolite (5-HIAA) studies in depression, impulsivity, and violence. *J Clin Psychiatry* 1990;51 (4, suppl):31-41.
- 4 Mann JJ, Stanley M, eds. *The psychobiology of suicidal behavior*. New York: New York Academy of Sciences. 1986.
- 5 Fuller RW, Perry KW, Bryan BM. Effect of an uptake inhibitor on serotonin metabolism in rat brain: studies with 3-(*p*-trifluoromethylphenoxy)-*N*-methyl-3-phenylpropylamine (Lilly 11014). *Life Sci* 1974;15:1161-1171.
- 6 de Montigny C, Chaput Y, Blier P. Modification of serotonergic neuron properties by long-term treatment with serotonin reuptake blockers. *J Clin Psychiatry* 1990;51(12, suppl B):4-8.
- 7 Wong DT, Fuller RW, Robertson DW. Fluoxetine and its two enantiomers as selective serotonin uptake inhibitors. *Acta Pharm Nord* 1990;2:171-186.