CLINICAL CASE

CASE REPORT - SERTRALINE INDUCED PSYCHOSIS

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Abstract
Mrs. P, an 18-year-old female adolescent who met the DSM-V criteria for an episode of major depression without psychotic symptoms. The main complaints were depressed mood, loss of interest, irritability, decreased concentration, loss of appetite and weight. She was treated with sertraline 30mg per day and after 2 weeks she developed psychotic symptoms. The patient appeared to have no known predisposition to psychosis. After discontinuation of sertraline, psychotic symptoms resolved. The emergence of psychotic symptoms, in patients with non-psychotic mood disorders can have future implications for their prognosis.

Key words: depressive disorder, sertraline, induced psychosis

INTRODUCTION
Selective serotonin reuptake inhibitors (SSRIs) are the most prescribed anti-depressants and among SSRIs, sertraline is one of most commonly prescribed. Sertraline is a potent inhibitor of neuronal serotonin reuptake, but it also can weakly inhibit the reuptake of dopamine, particularly at high dosages (1, 2). For this reason, sertraline has sometimes been described as a serotonin-dopamine reuptake inhibitor (SDRI) (3). But, significant inhibition of dopamine reuptake by sertraline at clinical dosages is controversial by experts (4). The clinical implications and significance of this combine serotonin and dopamine increase is not yet clarified.

Sertraline also have a relatively favorable side effect profile which includes nausea, diarrhea, tremor, dyspepsia, decreased appetite, hyperhidrosis, ejaculation failure, and decreased libido. But occasional cases of sertraline induced psychotic symptoms have been reported over the time (5, 6). We report a case of sertraline induced psychosis to a female adolescent patient.

CASE REPORT
Mrs. P, 18-year-old female adolescent came with her mother to an outpatient psychiatric clinic accusing that she cannot maintain her attention at school as she used to do and her grades were much lower than usual. She cannot eat anymore and lost weight (5 kilograms over the last month). She is always irritated and admits that she does not get along with his family anymore and everything seems pointless and cannot find pleasure in anything. During the last two month she didn't socialized as she used to do, argued with her friends and spend a lot of time in house “doing nothing”. She thought about suicide, but she had been too afraid about that.

She had no previous history of psychiatric treatment, suicide attempt, mania or psychosis. She reported an occasionally alcohol use in the last year and no drug use. There was no family history of psychosis or depression. Hematological and metabolic screening revealed no significant abnormalities. Thyroid functions were within normal limits. Any other medical condition was not identified.

Psychiatric examination revealed depressed mood, anhedonia, loss of appetite and weight, decreased concentration, fatigue and loss of energy, feeling of worthlessness, mild anxiety, symptoms which have been present for at least two month before presenting to the clinic. The symptoms had a significant impact on her overall functioning and were not better explained by physiological effects of a substance or another medical condition. She met the DSM-V criteria for major depressive episode without psychotic symptoms (7).

Mrs. P was treated in an outpatient psychiatric clinic with sertraline 25mg per day for the first 4 days and then 50mg per day. On the next evaluation after 4 weeks, there was no significant reductions in her depressive symptoms, but she reported auditory hallucinations over the last 2 weeks. She was anxious, agitated and reported difficulties in concentration due to the “voices who threatened her”. Her psychiatric exam revealed also delusional ideas of reference (strangers were watching her and talking about her) and she became more reluctant to attend school. No manic symptoms were observed.

The sertraline was discontinued and olanzapine 5mg per day was introduced. After one week her psychotic symptoms gradually decreased and at the next evaluation, after one month until olanzapine was introduced, psychotic symptoms were completely resolved, but depressive symptoms had no significant improvement. Olanzapine was gradually stopped over the next week and escitalopram 10mg per day was started. Over the next 3 months, Mrs. P depressive symptoms improved significantly. No psychotic symptoms reappeared.

DISCUSSION
The appearance of psychotic symptoms after the administration of an antidepressant may have different causes and implications in the future prognosis of the patient.

In some cases, psychosis can be a natural progression of an underlying psychotic disorder (schizoaffective disorder or schizophrenia). Mrs. P has no family history of psychosis or depression but she must be followed up for as much as possible throughout the course of her affective
Bipolar disorder often presents initially with one or more episodes of major depression with or without psychotic symptoms and the first episode of mania or hypomania may appear during treatment with an antidepressant. Mania can easily resemble psychosis in some cases. DSM-5 now consider that elevated mood induced by antidepressant can justify the diagnosis of bipolar disorder. This switching is particularly common among juvenile and young adults exposed to treatment with an antidepressant (8). However, clinical presentation of our patient was not suggestive for a manic episode, but follow up is necessary to exclude the emergence of mania at a future date and consequentially a change of diagnosis.

Psychotic symptoms following administration of an antidepressant may be due to an underlying medical condition, which was not yet identified or didn't express itself. Withdrawal from a psychoactive substance or use of a psychoactive substance may be implicated. Our patient denied any psychoactive substance use and any other medical condition was not identified.

Another possible cause of psychosis in a patient receiving antidepressant medication is pharmacokinetic interaction with other drugs the patient is taking. The possible interaction can be extensive. In our case, the patient only received the antidepressant.

In our patient the appearance of psychotic symptoms following administration of sertraline and their immediate disappearance after its discontinuation may suggest that sertraline induce the psychotic symptoms. No psychotic symptoms reappeared over the next 3 months. However, sertraline was not reintroduced to patient and escitalopram was administrated for the following months. Follow-up of the patient for an extended period of time will be necessary in this case.

The mechanism by which antidepressants (in our case sertraline) may lead to psychosis is still unknown and future investigations will determine their role. A caution approach may be necessary in starting antidepressant in a new patient with depression if one or more of the above clinical factors are present.

REFERENCES
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Conflict of interest: none declared
Financial support: none declared