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LETTER TO THE EDITOR

Efficacy of pramipexole on seasonal depression: a case report

Pramipeksolün mevsimsel depresyon üzerindeki etkinliği: olgu sunumu

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To the Editor,

Seasonal depression is characterized by recurrent depressive episodes observed in the fall or winter seasons for at least two consecutive years and regress in the spring or summer seasons and which cannot be attributed to any psychosocial stressors[1,2]. Pramipexole is a dopamine agonist that is commonly used in the treatment of Parkinson's disease and restless legs syndrome. The efficacy and safety of pramipexole in the treatment of unipolar and bipolar depression have been reported[3,4]. Nevertheless, there is no evidence for its clinical efficacy on seasonal depression. In this context, a patient with seasonal depression who responded to pramipexole is presented in this case report.

A 40 year old woman together with her sister were admitted to the psychiatry clinic for depressive symptoms including depressed mood, reduced amount of speech, diminished interest, loss of pleasure in almost all activities, feeling of worthlessness, recurrent thoughts of suicide, psychomotor retardation, fatigue, insomnia, and loss of appetite. The patient has been experiencing recurrent depressive episodes in the fall season (Criteria A, DSM-5, specifiers for depressive disorders, with seasonal pattern) and remission in the summer season (Criteria B) for the last 7-8 years (Criteria C). She recovered in January last year. Her previous depressive episodes lasted 2-3 months. However, this year, her depressive episodes relapsed both in the summer (June) and autumn (November) (Criteria D; the seasonal depressive episodes outnumber nonseasonal episodes) seasons. There were no detectable psychosocial risk factors for depression (Note A). The patient had no history of hypomanic/manic episodes (the differential diagnosis of depressive disorder from bipolar disorder) and other psychiatric or physical illnesses. When she gets sick, she goes to her mother's house as she does not want to do the household chores. She lies down in the dark all day, and does not come out into the daylight or talk. Her big sister had experienced major depression and moved to a sunny house.

The patient has taken 40 mg/day fluoksetin and 7.5 mg/day olanzapine over two years. She was also prescribed 60 mg duloxetine for a few times in the past year. 600 mg/day lithium and 25 mg agomelatine were added to her treatment regimen consisting of fluoxetine/olanzapine, and she was recommended to go out in the sun. Dose of lithium was increased from 2 tablets/days to 3 tablets/days.

It was determined in her three-week follow-up visit that she had a partial response to the treatment. Her amount of speech and psychomotor activity had increased. She had cooked and visited her relatives together with her sister. She was able to sleep through the night. However, she still did not want to get out of bed and go home. She also had hand tremor and swelling of the face. It was learned that the patient's tremor was evaluated the year before. The findings of her neurological examination and brain magnetic resonance imaging (MRI) performed back then were normal. Nevertheless, her repeat neurological examination revealed bradykinesia and blunted affect. She was not smiling in her former photographs taken when she was at a picnic, unlike her little sister who was smiling. Her treatment

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regimen was revised to include 100 mg/day sertraline, 25 mg agomelatonine and 0.50 mg/day pramipexole to be taken in two doses. The patient recovered completely after two weeks of treatment. The patient's tremor and swelling had resolved, as well. The patient now smiles.

The use of fluoxetine/olanzapine in combination with lithium has regressed parkinsonian symptoms, including tremor, bradykinesia, and rigid face. The history of tremor and typical unexpressive face seen in family photographs suggest dopaminergic deficit and vulnerability to parkinsonism in the patient with seasonal depression. Olanzapine, a dopamine receptor blocking agent, and lithium, another medication that causes parkinsonism[5], were stopped. Instead, she was prescribed pramipexole, a commonly used dopamine receptor agonist known for its antidepressant effect. The patient improved dramatically after pramipexole treatment without any side effects. She was already taking agomelatine. She was given sertraline instead of fluoxetine. The patient was not expected that she would achieve full remission in a matter of just two weeks. The findings of this case study suggest that patient-specific treatment options should be taken into consideration in the treatment of seasonal depression.

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