SUICIDAL BEHAVIOR INDUCED BY PRAMIPEXOLE DIHYDROCHLORIDE: CASE REPORT

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BACKGROUND: Dopaminergic agonists are usually combined with L-dopa in Parkinson Disease (PD) in order to improve dyskinesia and motor fluctuations related with its prolonged administration. Remarkable evidence highlighted that dopaminergic medications in a subgroup of PD patients provoke impulse control disorders and related compulsive behaviors. Moreover, a small but growing literature suggests that this kind of drugs may also induce suicidal behavior. Suicide attempts are found among people who take Pramipexole dihydrochloride (about 2%).

OBJECTIVES: We present the case of a male patient with PD, hospitalized after a high-lethality suicide attempt (CO intoxication), whose suicidal ideation occurred shortly after the reaching of the final dose of a combined levodopa and pramipexole dihydrochloride therapy.

Our aim is to suggest that dopaminergic agonists should be dispensed with appropriate caution.

METHOD: A brief description about the patient’s clinical presentation and some neuropsychological findings are included.

RESULTS: At baseline the patient scored significantly high on STAXI-II (RS 86 vs 50) and BPRS (44 vs 30). We observed a complete and rapid recovery after pramipexole’s discontinuation. Then patients behaved with no history of depression or other psychiatric disorders and there was no history of suicidal behavior, psychiatric disorders, dementia, addiction and violence among his relatives. He is suffering from Parkinson’s disease from about 7 years and regularly takes levodopa/carbidopa (100/150/dag) and pramipexole RP (2.1 mg/day).

Apparently, the suicide attempt was related to a stressful life event: an altercation with his wife for a cup of coffee occurred, as he told, after lunch one day before. The following night he developed subtotal insomnia, feelings of solitude and he felt himself trapped in a feeling of being losing control over himself resulting in some suicidal thoughts. He was transported to the local first aid unit, he was obtained; after his vital signs were stabilized was transported to our psychiatric unit.

This was the first psychiatric hospital admission for Mr. M.R.

Retired, married for about 48 years, currently he lives with his wife and son.

The patient had no history of known drug dependence and he never drank alcohol nor smoked. He had not known to suffer from depression or any other psychiatric disorders.

On April, at the time of admission in psychiatric ward, he was sitting on a chair with his arms crossed, maintaining a poor eye contact. There wasn’t tremor of the extremities or heads led at 6/73. No neurological dysfunctions. Objectively he appeared tense, angry and sad at some times. Subjectively he reported feeling angry and desiring to put an end to his own life because “he cannot tolerate more his wife”. Standish and reluctant to the interview, the speech was short, hypomoric and monotonous.

At psycho-diagnostic assessment he achieved the following scores:
- Brief Psychiatric Rating Scale: 44/168
- State Trait Anger Expression Inventory: R/S 86%(Anger elevated), R/T 38%, ERIndex 42
- Barratt Impulsivity Scale-I: 67/120
- Beck’s Hopelessness scale: 17/20 (Severe hopelessness)
- Intent Score: Scale: 18/25 (Higher risk)
- Geriatric Depression Scale: 14/30 (Mild depression)
- Mini Mental State Examination: 27/30 (Good orientation)
- State-Trait Anxiety Test 9/8 (Parkinsonian disorder)

Investigating more accurately the medical history emerged relevant signs and symptoms over the last few months that had been completely overlooked.

In October of the preceding year, after the last increase in the dose of pramipexole dihydrochloride, he has become restless, irritable, dysphoric, intolerant to frustration, angry against his wife; at the same time it also appeared in his mind a prevailing idea of suicide that he had never had before. Moreover he suffered of sporadic auditory hallucinations and ideas of reference. He described hearing sounds, sometimes voices, musified and intelligible, saying his name or short sentences. There was no evidence of hallucinations in any other modality. Mr. M.R. and his wife denied both Impulsive Control disorders and Compulsive disorders.

All the described alterations, rapidly improved when the anti-Parkinsonian drug was reduced to 3/73 mg/day although it was necessary to add Clazoquine as symptomatic treatment. During the hospitalization, he started on Clazoquine initially at a dose of 12.5 mg/day with increase to 12.5 mg q.h.s until 75 mg/day. Over the course of 1 week, the patient manifested a stabilization of mood, sleep, and appetite. Except for the initial condition concerning his increased tendency to compulsive orulsive behaviors were observed; he denied any thought of death or suicide ideation. The restless showed a good improvement at BPRS (30/168) and STAXI II (R/S 50% anger moderate) so he was discharged and submitted to his wife.

CONCLUSION

This case demonstrates a clear temporal relationship between pramipexole dihydrochloride dose increase and behavioral changes in a patient without any psychiatric history or substance abuse before.

We have also observed the abating of these symptoms with the decrease of the treatment. We hypothesize that the attempt suicide could be the result of impulsive-aggressive behavior secondary to dopamine-agonist treatment.

We consider it appropriate that PD patients and their caregivers should be informed on the possibility onset of such changes.

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