Akathisia Induced by Abrupt Withdrawal of Risperidone: A Case Report

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ABSTRACT ~ Akathisia is a common movement disorder that occurs as a consequence of antipsychotic therapy. However, its occurrence secondary to risperidone withdrawal has been reported rarely. Reporting of such rare adverse event gains profound importance because changing the antipsychotics is very common in long term management of affective disorders. Here, we report a 17-year-old female who on withdrawal of risperidone developed akathisia. Further, we also discuss already reported cases in literature in relation to the current case. Psychopharmacology Bulletin, 2019;49(1):80–83.

CASE HISTORY

A 17 years old female, who was a known case of bipolar affective disorder was maintained on Aripiprazole, Carbamazepine from 13yrs. Six months ago, as her psychotic symptoms went out of control, she was switched from aripiprazole to risperidone. But in view of significant weight gain and menstrual irregularity, risperidone was stopped and aripiprazole was reintroduced.

SYMPTOMATOLOGY

After two days of Risperidone withdrawal, she complained of inner restlessness and was unable to sit at one place. On examination, patient was swaying. Romberg’s sign was positive. Other parameters were within normal limits.
Diagnosis

As initial work-up revealed no other cause for akathisia, a probable diagnosis of risperidone withdrawal induced akathisia was considered. To further confirm the diagnosis, risperidone was reintroduced at same dose as before, the symptoms of akathisia subsided in a week. After a month risperidone was tapered and stopped.

Treatment

After one week of reintroduction of risperidone, the withdrawal symptoms and restlessness alleviated.

Discussion

Risperidone, an atypical antipsychotic is primarily used for psychotic disorders. It is a benzisoxazole derivative having a very high affinity for serotonin (5HT2A) and moderate affinity for dopamine(D2), histamine(H1), α1 and α2 adrenergic receptors. Both subjective and objective evidence of restlessness is the central hallmark of akathisia. Many antipsychotic drugs can produce drug withdrawal associated symptoms. Drugs like Risperidone, Amisulpride have been reported to cause extrapyramidal symptoms in the withdrawal phase, but akathisia by risperidone withdrawal have been reportedly rarely in the literature. Withdrawal akathisia occurs while switching or stoppage of antipsychotics. The onset is found to be six weeks after stopping or reducing the dose of the drug. The increase in receptor binding sites and affinity provokes increased sensitivity to usual dopamine levels after abrupt stoppage of risperidone treatment. In present case, on cessation of Risperidone suddenly, patient experienced restlessness and irritability after two days. A total score of four in “Global assessment of Barnes akathisia rating scale” further confirms the diagnosis of akathisia. Both WHO and Naranjo’s causality assessment scales indicated that the adverse event was “probably” caused by risperidone withdrawal. Sanivarapu SL et al have reported a case of antipsychotic discontinuation syndrome post withdrawal of Risperidone 4 mg within 4 days of withdrawal, which improved by 50% within 3 days after re-initiation, complete resolution was seen after 2 weeks of re-initiation of drugs. Another clinical study called CATIE study has also reported an incidence of 35% of akathisia due to withdrawal of antipsychotics. Increasing age, was associated with tardive dyskinesia. Movement disorder (tardive dyskinesia) was shown as a predictor for supersensitive psychosis in
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<th>AUTHOR</th>
<th>AGE (YEARS)/SEX</th>
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<tr>
<td>Albowi MA et al⁸</td>
<td>32/female</td>
<td>Psychotic disorder</td>
<td>Risperidone 2 mg OD taken for 2 years</td>
<td>2 years</td>
<td>Difficult to swallow, nasal speech &amp; diagnosed as tardive dyskinesia due to risperidone withdrawal</td>
<td>Patient improved after 4 months of Tab. Amantadine 100 mg BD</td>
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<td>Rosebush et al⁹</td>
<td>69/female</td>
<td>Psychosis</td>
<td>Risperidone 1.5 mg BD for 4 months.</td>
<td>5 weeks after withdrawal</td>
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<td>Patient improved with Tab. Propranolol 20 mg qid.</td>
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<td>Our case report</td>
<td>17/female</td>
<td>Bipolar disorder</td>
<td>Risperidone 4 mg OD for 2 years</td>
<td>2 days after withdrawal</td>
<td>patient developed akathisia</td>
<td>Patient improved on restarting risperidone 4 mg OD</td>
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5–10 years follow up studies. Even though risperidone withdrawal induced akathisia is a rare occurrence, its possibility cannot be overruled.

REFERENCES