Drug Induced Obsessive Compulsive Disorder in Schizophrenia

Lt Col RK Saini*, Lt Col V Pande⁺

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Introduction

Risperidone is a novel and atypical agent with a dual antagonistic effect on 5-hydroxy tryptamine (5-HT) and D₂ receptors. Open-label reports and one controlled study suggest that risperidone addition is effective in patients with obsessive compulsive disorder (OCD) refractory to treatment with serotonin reuptake inhibitors [1]. However, risperidone has also been implicated in the production or exacerbation of OCD symptoms [2,3]. We report a case of schizophrenia in which risperidone was effective in the treatment of the psychotic symptoms but produced obsessive-compulsive symptoms. Obsessive compulsive symptoms emerged shortly after initiation of risperidone treatment with a dose above 3 mg/day. The obsessive compulsive symptoms subsided with gradual reduction of risperidone and addition of another antipsychotic quetiapine along with citalopram.

Case Report

A 20 year old serving soldier presented with abnormal behaviour of two weeks duration. He was wandering aimlessly, smiling to self and neglecting self care. Initial mental status examination revealed first rank symptoms of commentary auditory hallucinations, referential delusions, thought broadcast, impaired insight, clear sensorium and disturbed biographies. There was no past or family history of psychiatric disorder. Relevant investigations ruled out organic factor for the illness. He was provisionally diagnosed as a case of schizophrenia and treated with risperidone 8 mg per day in two divided doses and trihexyphenidyl (pacitane) 4 mg per day in two divided doses. Patient showed gradual improvement in that his behaviour normalised, delusions and hallucinations diminished and at the end of eight weeks of treatment he appeared asymptomatic. However, during routine interview he complained that he felt as if his hands were dirty and no matter how much he washed them, the feeling persisted. He recognised the thoughts as the product of his

own mind and regarded them as unwanted, irrational and distressing. He wasted up to 3-4 hours per day washing his hands and consumed one soap case in two days for his ritual of hand washing. Any attempts to resist hand washing resulted in anxiety and restlessness. Patient was diagnosed as a case of drug induced OCD. He was treated with gradual lowering of risperidone to 2 mg/day, gradual build up of tablet quetiapine up to 200 mg/ day and citalopram 40 mg /day. Patient improved in three weeks. He was sent on six weeks of sick leave with this drug combination. After completion of sick leave he was asymptomatic.

Discussion

The occurrence of obsessive compulsive symptoms in schizophrenia ranges from 7.8 - 46.6%. Atypical antipsychotics are now widely used in treatment of schizophrenia. They exert a beneficial effect even in cases resistant to typical antipsychotics. They have also enhanced the ratio of therapeutic efficacy to adverse effects. Risperidone is a novel and atypical antipsychotic agent with dual antagonistic effect on 5-HT₂ and D₂ receptors[4,5]. It is interesting to note that both schizophrenia and OCD share disturbance in serotonin/dopamine transmission patterns and the relationship may appear complex depending upon the degree and areas of involvement of the two systems. It is evident that obsessive symptoms are fairly common in schizophrenia and many cases of obsessive compulsive disorder lose insight into the abnormality of their thoughts which may actually become ego-syntonic thus crossing the boundary towards a delusional state. Further, there is in-vivo evidence available for abnormalities in the binding potential of the dopamine D₂ receptor, which suggest direct involvement of the dopaminergic system in the pathophysiology of OCD [6]. It is likely that risperidone because of its dual action on serotonin and dopamine receptors may lead to serotonin- dopamine imbalance

*Classified Specialist (Psychiatry), MH, Jodhpur. ⁺Classified Specialist (Psychiatry), Command Hospital (Northern Command), C/o 56 APO.

thus leading to treatment emergent OCD.

Treatment emergent obsessive – compulsive symptoms have raised concern since the widespread introduction of serotonin- dopaminergic antagonists for the treatment of schizophrenia. To conclude, close monitoring of patients receiving risperidone with gradual escalation and low final dose may be helpful.

Conflicts of Interest

None identified

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