

CASE REPORT

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Thought broadcasting of obsessions in patient with difficult to treat schizophrenia

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ABSTRACT

Objective: To study a rare presentation of obsessions as thought broadcasting in patient with difficult to treat schizophrenia.

Methods: We report a case of difficult to treat schizophrenia in a patient, who was treated with different atypical antipsychotics. During the course of treatment with Paliperidone, the patient developed obsessions (thought/image) and these obsessions later became the content of thought broadcasting.

Results: Symptoms of schizophrenia improved with Clozapine and obsessive compulsive symptoms improved with Paroxetine.

Conclusion: Clinicians should consider transformation of psychopathology in patients with difficult to treat schizophrenia.

ARTICLE HISTORY

Received June 10, 2017

Accepted September 12, 2017

Published October 06, 2017

KEYWORDS

Thought broadcasting of obsession; difficult to treat schizophrenia; schizophrenia; obsessive compulsive disorder

Introduction

Prevalence of comorbid obsessive-compulsive disorder (OCD) and schizophrenia varies from 7.8% to 40.5% and often there is overlapping of symptoms such as motor retardation, ambivalence, and obsessions [1–3]. The OC symptoms may develop with the use of atypical antipsychotic in treatment of schizophrenia [4,5]. In the presence of first-rank symptoms, OC symptoms are often overlooked or missed due to hierarchical assumptions of diagnostic systems and methodological issues [6]. This is important as inadequate treatment of OCD in schizophrenia may lead to partial remission [7]. Here, we are reporting a case of a rare symptom, thought broadcasting of obsessions in a patient with schizophrenia that developed during treatment with Paliperidone.

Case Report

A 44-year-old married woman, homemaker, who hails from an urban background presented with complaint of talking to self, abusing others, and discomforting experience of getting repetitive uncontrolled sexual images and urge to utter foul words

with sexual connotations of a few months duration. Failure to resist this urge often results in uttering them aloud with temporary relief. The distress she experiences increased when these sexual thoughts and images, which she identified as her own and useless, were being broadcast to everyone through mobile phones with the motive of alerting them about her and misleading them into believing that she is not a good lady. She also reported that while sitting alone, she hears voices of females talking to her or discussing among themselves about her, usually criticizing her.

The first episode of her illness started 4 years back characterized by suspiciousness and hearing voices of many people talking ill about her among themselves. She had stopped interacting with people, remained confined to home, stopped doing household work, and her personal care deteriorated. Initially, a diagnosis of paranoid schizophrenia was made and she was treated with tab Quetiapine up to 600 mg for a month without much improvement, followed by tab Risperidone that was optimized to 4 mg and all symptoms showed improvement. Due to weight gain, tab Risperidone was switched to tab

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Paliperidone at an optimized dosage of 6 mg and she became mentally stable for 6 months.

While still compliant on medication, the current episode started with no improvement in mental state even after increasing the dose of Paliperidone up to 18 mg. At this point, she began to experience thought broadcast, and the content was the distressing sexual thoughts and images which she identified as her own and useless. There was no history of other mental or physical illness in the past. Her paternal cousin had a history suggestive of a psychotic illness. Patient was premorbidly well adjusted.

Physical examination revealed that her BMI was 30.4. Blood investigation revealed HDL Cholesterol 54 mg/dl (>60 mg/dl = normal), LDL Cholesterol 146 mg/dl (<130 mg/dl = normal), and Triglycerides 186 mg/dl (<150 mg/dl = normal). Other reports such as TLC, DLC, FBS, PPBS, and ECG were within normal range.

Mental status examination revealed auditory hallucinations (2nd and 3rd person), delusions of reference and persecution, obsessions of obscene words and sexual images, compulsive utterance, thought broadcasting (of obsessive thought and image), and she was anxious. The Yale-Brown Obsessive-Compulsive Scale (YBOCS) score was 27/40 and the Positive and Negative Syndrome Scale (PANSS) score was 97.

A diagnosis of Paranoid Schizophrenia and Paliperidone associated Obsessive-Compulsive disorder was made and she was started on tab Paroxetine 25 mg/day and tab Aripiprazole 10 mg/day that was further optimized to 30 mg/day. Significant improvement was observed in OC behavior (YBOCS = 6), but other symptoms remained the same even after 3 weeks of optimizing the dose. Then tab Amisulpride was started and optimized to a dose of 300 mg/day and no significant improvement was observed on assessment even after 4 weeks. The dose could not be increased further due to development of tremors. Keeping in mind the difficulty to treat with antipsychotics and remission status of OC symptoms, tab Clozapine was started and the dose was optimized to 100 mg/day after discussion with the patient and tab Amisulpride was tapered off. The patient showed marked improvement in overall symptoms (PANSS = 44) after 2 weeks without worsening of OC symptoms (YBOCS = 6). Initially, the patient developed drowsiness in the morning that improved after educating the patient about sleep hygiene. Dietician consultation improved weight control in the patient. Blood TLC, DLC, and vitals monitoring was done on a weekly

basis for next 3 months and patient maintained improvement with the same dose of medications.

Discussion

This case is unique because of two reasons. Firstly, thought broadcasting of obsessions; secondly, presence of difficult to treat schizophrenia (a management challenge). Though there are reported cases of obsessions transforming into delusion due to loss of insight, but to the best of our knowledge this is the first report of thought broadcasting of the obsessive thoughts. Patient's preoccupation was worsened due to repetitive thoughts (obsessive sexual thought/image), while the distress she experienced increased because of thought broadcasting of the obsession. Overlapping symptoms of OCD and schizophrenia may be missed in the routine clinical examination. It is difficult to identify an obsession when the theme of obsession is similar to that of delusion, in presence of formal thought disorder or obsessive psychomotor symptoms (slowness) and there is no universally accepted method to examine OCD in the presence of schizophrenia [8]. Association of OCD and schizophrenia has been acknowledged decades back and is reported to develop spontaneously, sequentially, or after the use of atypical antipsychotics [9]. Persistent OC symptoms are also considered as a risk factor for schizophrenia, particularly, in relation to several symptoms (positive symptoms, bizarre behavior, and suspiciousness/paranoia) and the stage of schizophrenic illness [8,10,11].

Review of the literature revealed that unlike atypical antipsychotic-induced OC symptoms, comorbid OCD has a fluctuating course, with minority having worsening or improvement in severity, which may indicate interaction between environmental factors and symptoms during the longitudinal course of illness [4,5,9]. Stengel conceptualized it as a part of the adaptive defense mechanism due to an interaction between neurotic manifestations and psychotic reactions [12]. Both disorders are linked to neuroanatomical structure such as the ventromedial prefrontal cortex and the dorsolateral prefrontal cortex with different neuroanatomical connections, including the striatum [13].

Use of atypical antipsychotics in schizophrenia has been associated with OC symptoms (sexual images) [13-17]. Being a major active metabolite of Risperidone with similar properties, Paliperidone is also likely to be associated with emergence of OC symptoms in patients with schizophrenia. They

usually develop months after their use and are more of images or urges [4,5] and remits with Selective serotonin reuptake inhibitors (SSRIs). The role of 5-HT_{2A} and 5-HT_{2C} receptor antagonism has been attributed in the development of these symptoms, particularly, super-sensitivity of the 5-HT_{2C} receptor [18,19]. These receptors are present in greater number in basal ganglia, a structure implicated to be linked to OCD in imaging studies [19,20].

With this case, it can be concluded that atypical antipsychotics-induced OC symptoms and schizophrenia may present with overlapping of symptoms, and clinicians should consider transformation of psychopathology in patients with difficult to treat schizophrenia.

Acknowledgments

The authors would like to thank Yahosha, Shamaya, Hagai, Asther, Yasuas, Marias, Ashish, Akash, and Mini (Divine Retreat Centre, Chalakudy, Kerala, India) for their moral support.

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