Somatic delusions and obsessive-compulsive disorder in schizophrenia

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Abstract

This review is based on a case study of a clinical presentation of schizophrenia with somatic and olfactory delusions and obsessive-compulsive symptoms (OCS). The patient was seen at the surgical out-patient department of the Dr George Mukhari Academic Hospital, Ga-Rankuwa, complaining of a dilated anus and requesting its reduction by the doctor on duty. The patient was later referred to the psychiatry department of the same hospital and diagnosed with schizophrenia with somatic delusions and OCS according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria. He was screened for schizophrenia, OCS and olfactory and somatic delusions by means of a systematic psychiatric interview and the administration of specific assessment scales. The diagnosis was then confirmed to be schizophrenia with olfactory and somatic delusions and obsessive-compulsive disorder (OCD) features. This presentation suggests unique ways in which schizophrenia could present, including somatic and olfactory delusions and features of OCD, which may significantly influence the functional outcome of patients. This case study highlights the importance of identification and treatment of OCD in schizophrenia.

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Case Report

A 20-year-old male presented with a symptom profile suggestive of chronic psychosis associated with obsessions and compulsions in May of 2006. Anxiety and depressive symptoms were also present. He had started behaving strangely in 2000, when he was 14 years old, isolating himself and avoiding having anyone near him.

He was initially referred to the surgical out-patient department (SOPD) by a social worker for anal malfunction and suspected sodomy. He had been a surgical patient between 2003 and 2006. The working diagnosis included haemorrhoids (grade 1), anal fissure, constipation and incontinence of gas with a normal anus. He was managed conservatively with analgesics, stool softeners, antiseptics, antibiotics, dietary advice and reassurance. He was later referred to the psychiatry department from the SOPD for demanding a surgical procedure for a "dysfunctional" anus.

Collateral information revealed that both his mother and his maternal grandmother had past histories of psychiatric illnesses in the form of psychotic symptoms (persecutory delusions and auditory, tactile and olfactory hallucinations). Both also had a history of alcohol abuse. The mother was subsequently diagnosed and treated for temporal lobe epilepsy.

There were no abnormal findings on routine physical examination and laboratory tests (blood glucose level, thyroid function, full blood count, HIV, CD4 count, liver function, and urea and electrolytes), including an electroencephalogram test and appropriate drug screening.

A diagnosis of schizophrenia was confirmed using a standard systematic psychiatric interview,[1] which also assesses the mental status of the patient. In addition, collateral information was obtained from the family. Rating scales were administered under supervision by the author to establish the diagnoses of psychosis and other comorbid disorders over a period of one week. The following rating scales for the assessment of the mental condition were administered: the Positive and Negative Syndrome Scale (PANSS), the Hamilton Rating Scale for Depression, the 17 item scale ($HAM\text{-}D_{17}$), the Brief Psychiatric Rating Scale (BPRS), the Alcohol Use Disorder Identification Test (AUDIT),[1,2] and the Yale-Brown Obsessive Compulsive Scale (Y-BOC Scale).

Results

The most significant findings were those of the Y-BOC Scale and the PANSS, which were used to assess psychopathology, insight and social and occupational functioning.

The Y-BOC Scale revealed strong obsessive and compulsive behaviour. He was initially completely non-functional but became functional, on treatment and with assistance. There was much overall improvement in the obsessive symptoms, but minimal improvement in the compulsive symptoms.

He scored high for positive symptoms, such as hallucinations, somatic delusions, hostility and suspiciousness, on the PANSS. The test revealed minimal change in affect and emotional withdrawal.

The differential diagnoses for this case is as follows:

- Olfactory-reference syndrome[3]
- Body-dysmorphic disorder and hypochondriasis[3]
- Obsessive-compulsive disorder (OCD)[1]
- Schizophrenia with obsessive-compulsive symptoms (OCS)

Discussion

This case study specifically explores the issue of OCD presentation in schizophrenia, by demonstrating the diagnostic dilemma associated with this condition with regard to current diagnostic systems. The patient met most diagnostic criteria for OCD. It is noteworthy that Poyurousky et al,[4] using similar diagnostic criteria and methods of evaluation, reported a lower frequency of OCS. These findings are consistent with the results of the study examining the prevalence of OCD in schizophrenia patients. The patient did not differ significantly from those of other study populations in terms of the onset of schizophrenia and OCD scores. Nechmad et al[5] found high affective flattening in patients with schizophrenia and comorbid OCD, which is not in line with findings by Poyurousky et al.[4] The patient's negative symptoms fall between the results of the other two studies.

The preliminary findings indicate that schizophrenia is the most likely diagnosis because of the chronic psychosis, together with the delusions and deterioration in function. Alternatively, the obsessive-compulsive symptoms (OCS) may be part of the natural course of schizophrenia in a subset of patients, in view of the fact that the two disorders apparently involve a dysregulation of common interacting neurotransmitter systems (such as serotonin and dopamine) and neuronal circuits.[4]

Treatment

The patient presented with prominent positive and negative OCS that were further complicated by depression and suicidal behaviour. Clozapine was administered after the failure of risperidone due to side effects.[6]

Conclusion

A higher rate of OCS has been found to occur with schizophrenia with OCD, compared to schizophrenia without OCD. In 20% of schizophrenics with OCS, the latter psychotic symptoms precede the former psychotic symptoms. The prognosis for this OCD subtype is worse than the other subtypes.[7] It is also documented that schizophrenia predisposes patients to manifestations of OCD. This is termed 'schizo-obsessive'.[8] The co-occurrence of OCS and schizophrenia has been a challenge for clinicians and investigators for centuries.[9] The significance of this case study is that patients with bizarre and unexplained somatic complaints (such as a large anus or other unreasonable complaints) should be discussed in a multidisciplinary setting as early as possible, to facilitate planning for more effective intervention. Future studies are warranted to evaluate and compare the co-occurrence of OCD and schizophrenia, the clinical course, the response to treatment and the prognosis for this disorder.

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