

## CASE REPORT

**Auditory Hallucination in an Obsessive Compulsive Disorder Adolescent***Khadijah HAA<sup>1,2</sup>, Seed HF<sup>1</sup>, Lee VY<sup>1</sup>, Wan Salwina WI<sup>1</sup>*<sup>1</sup>Department of Psychiatry, UKM Medical Centre, Kuala Lumpur, Malaysia<sup>2</sup>Universiti Sains Islam Malaysia, Malaysia**Abstract**

Although comorbidity of obsessive compulsive disorder (OCD) with schizophrenia is well-established, the occurrence of psychotic symptoms especially hallucinations with OCD still requires further studies. We report a case of a child with OCD who experienced auditory hallucination with the recurrence of his OCD symptoms and the management involved. We discussed the possible differentials when auditory hallucinations occur in the context of OCD.

**Keywords:** Obsessive Compulsive Disorder, Auditory Hallucination, Psychosis, Schizophrenia

**Introduction**

Obsessive compulsive disorder (OCD) is a complex and distressing disorder. It has a lifetime prevalence of 2.3% and about a quarter of males with OCD developed before age of ten<sup>1</sup>. OCD or OC symptoms in psychotic disorders like Schizophrenia has been well established, with a prevalence rate as high as 15%<sup>2</sup>. Interestingly, psychotic features such as hallucinations are also being reported to occur in patients with OCD<sup>3</sup>, but with poorer understanding.

This case study describes a child who was diagnosed with OCD and later developed auditory hallucinations when his OCD symptoms recurred.

**Case study**

Mr A was first diagnosed to have OCD at the age of nine years old, during which he presented with obsessions of contamination and doubts, and compulsion of washing and checking. The episode was triggered after he was bullied by his schoolmates to pick up stool with his bare hands. He had repeated thoughts of 'things being dirty' resulting in repeated washing of his hands and feet. He avoided touching and being touched for fear of contamination. There was also repetitive checking behaviour such as checking the car locks. The symptoms distressed him and his family members. There was also impairment in his academic and social functioning.

He was treated with escitalopram which was gradually titrated to 10mg daily. He was also taught relaxation and breathing technique, and exposure and response prevention therapy. He responded well to treatment and medication was stopped after two years of complete remission.

Two years after stopping the medication, he had a relapse. The episode was triggered by a break up with his girlfriend. At the same time, he was also very stressful with his academic work. The clinical presentation was different compared to the first episode. During the initial period, he had obsessions of contamination and compulsion of washing, but were later replaced with obsessional thoughts and images of self aggression and aggression towards others. He had images of hurting himself and his ex-girlfriend. He also had auditory hallucination which was second person and commanding in nature. The voices were congruent with his obsessional theme of aggression. The symptoms distressed him to the extent of affecting his academic performance. There were no depressive symptoms and other psychotic symptoms.

There was strong family history of mental illness. His paternal grandaunt and maternal uncle had history of untreated mental illness. His eldest sister was a perfectionist and had history of depression during adolescent period. Both parents had obsessional traits. They were perfectionist, highly ambitious, and had high expectations in academic achievements of the children. They were also particular about cleanliness and tidiness. The obsessional traits were reflected in their parenting and modeled by the children. He also had poor coping and poor stress management.

MRI was done to rule out organicity, which showed no abnormality. Combined

treatment of medication and psychological intervention were started. Antidepressant was restarted and a low dose of antipsychotic added. Cognitive Behaviour Therapy was introduced to help him with the obsessional thoughts as well as the cognitive errors. He was also taught stress management and efficient coping skills. A family session was also conducted.

He improved with treatment but took relatively longer time to respond. The OCD symptoms and auditory hallucination disappeared after starting treatment. Psychological intervention focused on stress management and coping skills as he struggled to manage his stressors which were mainly academic and relationship issues.

## Discussion

OCD was once grouped under anxiety disorders but the new DSM 5 recognizes it as a group on its own; "Obsessive-Compulsive and Related Disorders" and it can be diagnosed with a specifier of absent or delusional beliefs, thereby still retaining the patient in OCD rather than a psychotic disorder<sup>4</sup>. Hallucinations in OCD had been reported<sup>3</sup> but require further research.

Differentiating one's own thoughts and true auditory hallucination can be challenging especially in children or adolescent. Pseudohallucination is one possible explanation for 'hearing voices' in an adolescent who was distressed with the OCD symptoms. However, this patient was able to delineate the perceptual disturbance he had, as opposed to his own thoughts. Although there was no external stimulus to the hallucination, there was internal stimulus, where he had images of aggression along with the voices. According to Vera et.al.<sup>3</sup>, children with OCD often had inner

voice ordering ritualization. Furthermore, the perceptual disturbance accompanied the obsessions, and not compulsion as described by Miguel<sup>6</sup> in his discussion of “sensory phenomena”, where sensations or urges may precede or accompany repetitive behaviours in OCD patients. In this case, the voices he heard were homicidal and suicidal in nature thus prompting immediate intervention of antipsychotic that was beneficial for him.

Fontenelle<sup>3</sup> shared a case of a patient with a diagnosis of Schizophrenia and retrospectively found out to have obsessive compulsive disorder during adolescent with auditory hallucinations and treatment was changed accordingly. OCD has been suggested as prodromal symptoms in schizophrenia<sup>7</sup>. Similarly, OCD and schizophrenia commonly co-occur. Studies also show that Schizophrenia patient with OCD who respond poorly to antipsychotic may benefit from adjunctive treatment of anti-OCD<sup>8,9</sup>.

Schizophrenia and OCD possibly lies in a continuum where they could have overlapping psychotic symptoms like hallucinations. One useful differentiating factor is the impaired reality testing that occurs in Schizophrenia as compared to those with OCD. As Insel and Akiskal postulated, a neurotic obsession shift to psychosis when insight is impaired<sup>10</sup>. In this case, his reality testing remains intact. A review by Bottas et al<sup>7</sup> suggests OCD and schizophrenia to share some similarities in terms of neurotransmitters, neuroanatomy and neurocircuitary. However, these findings are still inconclusive and still require further research.

As a clinician, being aware of the possibility of psychotic symptoms in OCD would help the clinician to manage the patient better. Whether the patient would develop

schizophrenia or have a wax and wane psychotic symptoms with his OCD is something that remains unanswered at the present time.

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