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Olfactory Reference Syndrome Developed After Stressful Life Events and Response to Pharmacological Treatment: Report of Four Cases

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ABSTRACT:

Olfactory reference syndrome developed after stressful life events and response to pharmacological treatment: report of four cases

Olfactory reference syndrome (ORS) is a disorder of thought content characterized by strong beliefs in transmitting an unpleasant body odor and disturbing other people. ORS had not been recognized in the DSM-IV as a separate diagnosis; rather, it used to be categorized under delusional disorder, somatic type (DDST). Considering recent changes in the DSM-5, the syndrome is currently listed under the section of other specified obsessive-compulsive and related disorder with the name Jikoshu-kyofu, thus still not described as a major distinct entity. We claim that a universally accepted set of diagnostic criteria is lacking, and there is a set of overlapping symptoms with various other disorders. In this paper, we discuss four patients presenting with ORS after a triggering stressful life event from the nosological and treatment perspective, focusing primarily on antipsychotic augmentation.

Keywords: olfactory reference syndrome, delusional disorder, treatment, obsessive compulsive disorder, aripiprazole, stressful life event

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INTRODUCTION

Olfactory reference syndrome (ORS) is a disorder of thought content with a longstanding history characterized by erroneous beliefs about emitting a foul odor and therefore displeasing other people.

There are criteria proposed in the literature for differentiating ORS from other anxiety disorders, body dysmorphic disorder or obsessive-compulsive spectrum disorders¹. Yet, ORS had not been recognized in the DSM-IV as a separate diagnosis. It used to fall under the category of delusional disorder, somatic type (DDST). Considering recent changes in the DSM-5, the syndrome is currently listed under the section of other specified obsessive-compulsive and related disorder with the name Jikoshu-kyofu, thus still

not described as a major distinct entity. A universally accepted set of diagnostic criteria for the syndrome is lacking^{2,3}. In addition, the term "olfactory reference syndrome" is not mentioned in the ICD-10, other than in a brief note about such delusions⁴. This uncertainty could be due to both the symptomatic overlap between ORS and various other disorders and the physicians' unfamiliarity with the syndrome. Actually, most of the cases diagnosed with ORS are patients without a concurrent psychiatric diagnosis, and ORS has been described as a discrete syndrome across many cultures for more than a century⁵.

In the recent literature, ORS is described as a delusional condition in which the olfactory delusions last longer than five minutes and may even continue for hours. Patients are extremely

preoccupied with their body odor and insist on the reality of their perception despite alternative explanations to the contrary. Moreover, they blame themselves for it and frequently apologize for the unwanted odor which neither exists nor is perceived by others. Accompanying compulsory behaviors such as brushing teeth or changing clothes unnecessarily may be reported. Most commonly, the persons are convinced that they emit a foul odor from the skin, mouth, rectum, or vagina⁴. The thought disorder encountered in ORS is of non-bizarre nature, and patients have a varying degree of insight.

Here we present four cases diagnosed with olfactory reference syndrome, aiming to contribute to the current body of literature about the nosological status of the condition and to discuss effective treatment options.

CASE 1

A 30-year-old single male, admitted to our psychiatry outpatient clinic with a complaint of foul body odor. His complaints had started nine months ago while attending a seminar. He stated that a man sitting next to him asked him a question and had an unpleasant expression on his face subsequently. The patient had a belief that he might be emitting a foul odor that caused this response, and this belief grew stronger, finally starting to affect his daily life and occupational performance negatively. His physical and neurological examinations were completely normal, as were the laboratory investigations. Fluoxetine 60 mg/day and aripiprazole 15 mg/day were prescribed. He returned to his normal functioning along with significant improvement of his delusions.

CASE 2

A 17-year-old single female patient claimed that her smell was irritating. She reported that she did not sense the smell herself but knew it from other people's reactions. Her complaints had started when she was 13 years old and had been

distressed by some problems at school, after which she became more withdrawn over time. The patient was treated with sertraline 100 mg/day and aripiprazole 10 mg/day and finally responded well, with a significant improvement in her delusional symptoms.

CASE 3

A 26-year-old male patient. He was unemployed and living with his family at his admission. He was referred to our outpatient clinic from the gastroenterology department. He was complaining about a foul odor coming from his mouth and denied any other psychiatric complaint. He reported that about one and a half years ago, one of his colleagues at the office had told him that he had a bad smell of the breath, after which he started to take precautions. Although his girlfriend denied, he still believed that he was emitting the odor, which finally resulted in his resignation from his work. He became isolated from his friends and separated from his girlfriend, avoided using public places or transportation, all because of the halitosis he thought to be suffering from. He had applied to internal medicine clinics many times and sought help to get rid of this odor, which however could not be detected by anyone else. His mental examination revealed a depressive mood, lack of self-esteem with ideas of worthlessness and somatic beliefs of halitosis. No significant information was detected in his psychiatric and family history. He was diagnosed with olfactory reference syndrome and co-morbid major depressive disorder. He was prescribed sertraline 50 mg/day. The depressive and delusional symptoms diminished and a significant increase in his level of functioning was observed.

CASE 4

The 61-year-old male patient working as a lecturer at a university was admitted to psychiatry outpatient clinic. 42 years earlier, he had gone abroad for education, where he said he had led a

stressful life. He reported that his complaints had started after one of his friends commented that he was smelling. He used to think that he had been smelling badly, disturbing people around him. He had especially believed that the foul smell came from his pubic region. He had applied to non-medical counselors and had undergone acupuncture and other invasive interventions, even resection of his sweat glands. These operations had not helped him with the problem, and his belief of emitting a bad smell eventually got stronger. He acknowledged that his social life had also been affected negatively by this situation and he could not get married just because of his problem. Consequently, depressive symptoms emerged. A combination of venlafaxine 75 mg/day and aripiprazole 15 mg/day was started for his depressive symptoms and persistent erroneous beliefs of body odor. He showed marked improvement in his functioning with decreased depressive symptoms and less severe somatic preoccupations.

DISCUSSION

We present ORS to raise clinicians' awareness, given that an impairment is reported, with patients seeking nonpsychiatric treatment from gastroenterologists, dermatologists, dentists and other specialists; however, such treatments appear to be generally ineffective⁶⁻⁸. The stated age of onset is <20 years in most cases reported, consistent with the cases we present here. All four of our patients experienced a significant social limitation in all aspects of their life due to feelings of embarrassment and avoidant behaviors. Contrary to depression, where the social withdrawal results from lack of self-esteem, here the cause of avoidance is patients' subjective belief about emitting a bad odor and disturbing other people. The symptoms in three of our reported cases started following a psychosocial stressor. All of our cases suggest the diagnosis of

obsessive compulsive disorder (OCD) with poor insight, but also body dysmorphic disorder (BDD). However, unlike BDD, the symptoms were limited to a false body odor rather than body appearance¹. Disordered perception does not necessarily accompany the symptoms, as the cases did not have olfactory hallucinations, nor did they smell the unpleasant body odor themselves. Outpatient treatment was adequate, but we should stress that suicidal ideation and attempt or the need for hospitalization are not rarely encountered in ORS.

The disorder is said to respond to antidepressants and psychotherapy more frequently than to neuroleptics alone⁹. There are multiple cases treated with antidepressant monotherapy^{6,10} which may distinguish the syndrome from a delusional disorder subtype, consistent with the recent reclassification in the DSM-5 in the "other obsessive-compulsive related disorder" section. This explains the positive response of Case 3 to single SSRI treatment. However, we had to augment the SSRI therapy with aripiprazole in the other three cases, similar with several other cases reported in the literature. The improvement achieved after augmentation may be considered consistent with the obsessive nature of the syndrome, based on the reported efficacy of aripiprazole augmentation on obsessive-compulsive disorder cases¹¹.

CONCLUSION

Despite olfactory reference syndrome having a long-standing history dating back to the late 1800s¹², still a clear frame of diagnosis and management for ORS has not been established. Since it is a rare syndrome, case reports may still provide valuable information for clinicians. The presented cases suggest a relationship between a triggering stressful life event and the onset of ORS. We should also underline the presence of good response to augmentation strategies with an atypical antipsychotic, aripiprazole.

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