# Shared or Induced Olfactory Reference Syndrome

N. A. Uvais, MBBS, DPM, and Shamsudeen Moideen, MD

Shared or induced obsessive-compulsive disorder (OCD) is a rarely reported entity in the published literature unlike shared or induced delusional disorder (folie à deux).[1,2] Olfactory reference syndrome (ORS) is an underrecognized condition characterized by preoccupation with body odor accompanied by significant distress and functional impairment.[3] Many scholars consider ORS as an unusual subtype of OCD, and it is currently placed in the *DSM-5* under "other specified obsessive-compulsive disorders."[4,5] Here, we report the case of 2 sisters with induced ORS and discuss their treatment course.

## Case Report

A 22-year-old woman presented to the outpatient department of medicine with a 15-day duration of illness with complaints of unpleasant odor of sweat emanating from her armpits. The unpleasant odor persisted even after excessive washing or a bath. She also reported a fear of causing disgust in others due to the unpleasant odor of sweat. However, COVID-19 restrictions helped her to limit social interactions with others. She also reported unpleasant odor of cooked food, especially food bought from outside the home. Clinical evaluation and electroencephalogram showed no features suggestive of epilepsy. She was referred for psychiatry evaluation. There was no history of obsessive phenomenon or other psychiatric illness, and her premorbid personality was well adjusted. She reported that her younger sister was also suffering from the same set of symptoms for the last 1.5 months, which started after taking homeopathic medications for the prevention of COVID-19. It started with bad taste in mouth and bad smell of cooked food (which she used to eat while holding her nose), followed by unpleasant odor of sweat emanating from her armpits. There was no history suggestive of a dominant-submissive relationship with her younger sister.

Mental status examination revealed anxious affect and overvalued idea regarding unpleasant odor of sweat. She was diagnosed with shared or induced olfactory reference syndrome and was started on oral sertraline 50 mg/d, which was gradually titrated to 100 mg/d. Since separation of the 2 sisters was not feasible, that step was not attempted. She reported significant improvement in her symptoms over a period of 2 months. Her sister also presented for consultation later and was started on oral fluoxetine 20 mg/d, which was gradually titrated to 40 mg/d. Most of her symptoms resolved over 2 months. However, at the time of this writing, occasional experiences of bad taste while eating food persist.

## Discussion

The present case, to the best of our knowledge, is the first report of shared/induced ORS. Considering the chronology of the onset of the illness in both patients, it seems that the younger sister shared/induced ORS in the patient. However, lack of an evident dominant-submissive relationship with her younger sister also indicates the possibility of independent progression of ORS.[1] Both genetic and environmental (learned phenomena) risk factors might have played a significant role in inducing ORS in our patient.[5] The present case also highlights the effectiveness of selective serotonin reuptake inhibitors (SSRIs) in treating ORS, supporting the argument that a possible overlap exists between ORS and obsessive-compulsive spectrum pathology.[5] In conclusion, this report highlights a rare presentation of ORS as a shared disorder and its effective treatment with an SSRI without separating the 2 sisters due to feasibility issues.

## Article Information

**Published Online:** December 7, 2023. https://doi.org/10.4088/PCC.23cr03582



*Prim Care Companion CNS Disord 2023;25(6):23cr03582*

**Submitted:** June 16, 2023; accepted August 16, 2023.

**To Cite:** Uvais NA, Moideen S. Shared or induced olfactory reference syndrome. *Prim Care Companion CNS Disord*. 2023;25(6):23cr03582.

**Author Affiliations:** Department of Psychiatry, Iqraa International Hospital and Research Centre, Calicut, India (Uvais); Department of Internal Medicine, Iqraa International Hospital and Research Centre, Calicut, Kerala, India (Moideen).

**Corresponding Author:** N. A. Uvais, MBBS, DPM, Iqraa International Hospital and Research Centre, Calicut, Kerala, India (druvaisna@gmail.com).

**Relevant Financial Relationships:** None.

**Funding/Support:** None.

**Patient Consent:** Consent was received from the patient to publish the report, and information has been de-identified to protect anonymity.

## References


1. Gupta S, Prakash S, Sharan P. Shared or induced obsessive compulsive disorder: a case report with critical review. *Indian J Psychol Med*. 2017;39(3):384–385.
2. Kirpekar VC, Gawande S, Tadke R, et al. Shared or induced obsessive compulsive disorder: is it a reality? *Indian J Psychiatry*. 2014;56(1):72–75.
3. Singh GP. Is olfactory reference syndrome an OCD? *Indian J Psychiatry*. 2006;48(3):201–202.
4. AlHadi AN, Almaghrebi AH. Challenges in diagnosis and treatment of olfactory reference syndrome: a case study. *J Obsessive Compuls Relat Disord*. 2018;19:23–28.
5. Das S, Sekharan L, Prasad S, et al. Olfactory reference syndrome treated with lurasidone and cognitive behavioral therapy: a case report. *Clin Med Insights Case Rep*. 2022;15:11795476221139396.