

# Unremitting halitosis: A case of Olfactory Reference Syndrome

*Süregen Ağız Kokusu: Olfaktör Referans Sendrom Olgusu*

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## SUMMARY

Subjective halitosis is a chronic disorder and cannot easily be identified or measured by objective methods. The patients complaining with subjective halitosis usually refer to dentists, yet they reject to psychiatric consultations. One of its cause is Olfactory Reference Syndrome (ORS) which can be of anxiety, obsessional or delusional. ORS patients usually refer to others' behaviors; people's closing their mouth, coughing and touching their nose, opening window, turning faces to another side to protect themselves all give signs as to emitting malodor which patients misinterpret. This paper reports a 23-old female who suffers from halitosis since 3 years which is diagnosed as ORS and treated with Clomipramine.

**Key Words:** Olfactory reference syndrome, obsessive thought, clomipramine, antidepressants, subjective halitosis, delusional halitosis

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## ÖZET

Subjektif halitosis kronik ve kolayca tanı konamayan veya nesnel metotlar ile ölçülemeyen bir bozukluktur. Subjektif halitosis olan hastalar sıklıkla diş hekimlerine başvururlar, hatta psikiyatriste başvurmayı reddederler. Olfaktör referans sendrom (ORS) bunun sebeplerinden birisidir ve anksiyete, obsesyon veya paranoid şekillerde olabilir. ORS hastaları başkalarının davranışlarına atıfta bulunurlar; insanların ağızlarını kapatmaları, öksürme veya burunlarına dokunmaları, pencereyi açmaları, kafalarını başka yöne çevirmeleri hastaların koku yaydığını düşündürten işaretler olarak yanlış yorumlanabilir. Bu olgu sunumunda, 23-yaşında kadın hastanın 3 yıldır halitosis nedeniyle sıkıntı çektiği ve ORS tanısı konularak Klomipramin ile tedavi edildiği bildirilmektedir.

**Anahtar Sözcükler:** Olfaktör referans sendrom, obsesif düşünce, klomipramin, antidepresan, subjektif halitosis, delüsyonel halitosis

## INTRODUCTION

Halitosis is chronic, endogenous malodor and aetiologically classified from type 0-5; physiologic, oral, airway, gastroesophageal, blood-borne and subjective respectively (Aydın and Harvey-Woolworth, 2014). The subjective halitosis is characterized by malodor can not be confirmed by the other, further, there is no local or systemic problem despite the patient's complaints. Cases of halitosis may be misdiagnosed by clinicians (as much as 27% as indicated) (Falcao et al, 2012).

Subjective halitosis can appear in two clinical forms. Neurogenic (cacostmia-bad odor sense, phantosmia-imaginary odor sense, chemosensor dysfunctions) or psychogenic (anxiety, obsessional or delusional disorders including Olfactory Reference Syndrome (ORS) Özen and Aydın, 2015). ORS is one of the conditions mentioned in the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), (Kaplan HI, 2015) which is not categorized as a separate disorder, in which patients nongenuinely believe that they emit unpleasant odor include almost anything foul smelling are often from mouth, genitals, rectum, or skin (Kaplan and Saddock, 2015).

This case report illustrates a patient representing an ORS patient referred by halitosis clinics and evaluated by a psychiatrist which must be in the attention of medical settings (psychiatrists, ear-nose-throat specialists and dentists) and may be kept in mind during clinical and differential diagnosis processes.

## CASE REPORT

23-years old, single, female, healthy patient complained from halitosis with 3-years history (approximately during the beginning of her 20s which conforms with the literature) which has not been interrupted even for few minutes. She did not perceive oral malodor herself but thought that people around her were closing their mouth, coughing, touching and rubbing their nose or ridiculing her by turning their face away. She thought that everybody hesitated to contact her or talk to her even when her mouth was closed. She stated that she was feeling better when -she was- alone.

She was regularly brushing her teeth and tongue, not smoker, drinker or taking any medications regularly. Any systemic problem, including postnasal drip, enteric parasite, constipation, gastroesophageal reflux, allergy were not detected. Saliva volume was 2.5 ml/minute, pH was found 6.5 and H<sub>2</sub>S level was less than 100 ppb was found. Any dental caries, bad dental restoration, pathologic periodontal pocket, tongue coating were not detected. Cranial computerized tomography scan

showed no pathology. Any biological cause which may explain halitosis was not found and the patient remained unremitted until psychiatric interventions.

Blood screens, cranial magnetic resonance imaging and electroencephalogram, neurological examinations did not reveal any pathological signs indicating neurological disorders such as epilepsy. No discordance was disclosed by her family members.

The case was diagnosed as ORS regarding her history and symptoms and signs. So far, she has not applied to a psychiatrist before and had not taken any psychotropic medications.

Clomipramine was initiated with/ as 75 mg once daily and tolerated well. Although she showed some relief after 3 weeks with this treatment, addition of 75 mg clomipramine during the second 3-week interval resulted with 50% improvement. After 6 weeks, 225mg/day sustained for 6 weeks (totally 12 weeks) reaching a good result, as a consequence she began to socialize. Four-week interval monitoring (during next 12 weeks after first visit) revealed that her thoughts about others' behaviors and conversations between them changed and no social feedback to halitosis, or taking any reference behaviors were denoted with 225mg/d of clomipramine after 5-month follow-up.

## DISCUSSION

Because of the clinical nature, reports and debates on ORS has not been described and/or discriminated yet, this clinical situation apart from delusional disorders, social phobia, obsessive compulsive disorder and body dysmorphic disorder and requires/needs a clear definition (Cruzado et al, 2012). But, it is stated that fundamental problem is to outline the nature and existence of delusionality (Phillips, 1971). In some trends of psychiatric views on ORS; its conception is restricted to a mistaken judgment (Anglo-American); includes ideomotor and affective and perceptual phenomena (intuitions, interpretations, illusions, passion and imaginative exaltation) within the delusional phenomena (Continental European Psychiatry) (Ey et al, 1978); the essence of the delusion in the convictional certainty and absence of insight that other characteristics (extension, extravagance, pressure, affective response and influence) are not related with behavior (North American Psychiatry) (Oyebode F, 2008). In particular, the relation among ORS and other mental disorders are discussed and stressed elsewhere (Malasi, 1990; Davidson and Mukherjee, 1982; Masnik, 1983).

ORS has not been well separated from delusional disorders, or obsessive compulsive disorder (OCD) (Luckhaus et al, 2003). In particular, the relation

among ORS and other mental disorders have been deeply discussed (Malasi, 1990; Masnik, 1983).

In this case, the closest diagnose is halitophobia. Halitophobic patients do not complain from halitosis, but they fear of having halitosis without referring others (Özen and Aydın, 2015). Second possible diagnosis is OCD. To discriminate OCD, it is necessary at least one repetitive behavior (such as brushing teeth dozens time, smelling her own breath during the times with close friends many times every day) would be expected. Also, OCD patients think they emit malodor even when alone. This case mismatches such signs. Instead, the patient referred external abutments to her malodor.

In the literature, clomipramine (Kizu et al, 1984) and other tricyclic antidepressants (Brotman and Jenike, 1984) have been used to treat ORS cases. A patient which resisted to tranquilizers and a monoamine oxidase inhibitor has been reported (Phillips, 1971). This case responded well to clomipramine even in the first week.

Treatment should be monitorized by self-assessment or other people's assessments rather than halitometric examination, because complains are imaginary in subjective halitosis cases (Aydın, 2016).

Patients with halitosis apply firstly to dentists, but not to psychiatrists. Because of the complexity and difficulty in diagnosing, treating and patients' unawareness of halitosis and halitosis spectrum disorders, ear-nose-throat specialists, dentists and psychiatrists should be well trained on and aware of subjective forms of halitosis, especially with ORS and delusional forms of halitosis.

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