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Beyond 'Halitophobia': A Chairside Framework for Persistent Oral Malodor Complaints When Objective Findings Are Normal

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ABSTRACT

Persistent complaints of unpleasant breath in the absence of detectable malodor present a common and frustrating challenge in dental practice. Traditional labels, such as 'halitophobia', are imprecise, potentially stigmatizing, and may encourage repeated low-yield investigations and ineffective cosmetic interventions. Contemporary evidence suggests that a subset of patients with subjective malodor concerns resemble olfactory reference syndrome, now termed olfactory reference disorder in DSM-5-TR, characterized by preoccupation with emitting an odor, reassurance seeking, checking, camouflaging and avoidance. These behaviours can temporarily reduce distress, but may maintain symptoms and functional impairment. In this opinion paper, we propose a pragmatic chairside framework that separates genuine halitosis from persistent subjective odor concern using a minimum dataset of objective assessment, red flag screening and explicit exit criteria for repeated testing. We outline a perceptual-cognitive obsessive-compulsive model for subjective malodor presentations and suggest a stepped management pathway that includes empathetic validation, avoidance of repeated reassurance, targeted oral health optimization and timely referral for evidence-based psychological interventions, such as cognitive behavioural therapy with exposure and response prevention. Adopting a shared language and structured pathway may reduce iatrogenic harm, improve interdisciplinary care and provide patients with a clearer route to recovery.

Keywords: Halitosis, Pseudo-halitosis, Olfactory reference syndrome, Obsessive-compulsive disorder, Cognitive behavioural therapy, Halitophobia, Breath biomarkers.

1. Introduction

Current dental classifications distinguish genuine halitosis, pseudo-halitosis and halitophobia (1). Complaints of unpleasant breath are common in general dental practice, yet the clinical picture is heterogeneous. In many patients, objective malodor is present and can be traced to oral biofilm, tongue coating, gingival inflammation or periodontal disease. In others, patients report intense distress and social impairment although clinicians, family members and objective instruments detect little or no malodor. These presentations can lead to repeated appointments, repeated antimicrobial prescriptions and escalating self-care rituals without lasting benefit.

Objective malodor is best assessed using a combination of structured organoleptic scoring and targeted measures of volatile sulphur compounds. Trained organoleptic assessment remains central, supported where available by portable sulphide monitors and, in selected cases, gas chromatography for compound-specific profiling (2-8). The goal of testing is not perfection, but confidence: clinicians need sufficient

objective information to identify treatable oral causes and to recognize when further testing is unlikely to add value.

In practice, the label ‘halitophobia’ is often applied to any distressed patient with normal findings. This is problematic for two reasons. First, it risks stigmatizing the patient and weakening the therapeutic alliance. Second, it offers limited explanatory value and can encourage clinicians to continue repeating tests in the hope that the next result will finally reassure.

Parallel psychiatric literature describes olfactory reference syndrome, and more recently olfactory reference disorder, characterized by a persistent preoccupation with emitting an offensive body odor or breath that is not perceived by others, accompanied by repetitive behaviours, such as checking, washing, camouflaging, reassurance seeking and avoidance (9-16). These features overlap with dental presentations of persistent subjective oral malodor. A shared framework could help dental teams provide safer care, reduce iatrogenic harm and facilitate timely referral.

2. Materials and Methods

This opinion paper is based on a targeted narrative synthesis of dental and psychiatric literature and on pragmatic considerations relevant to chairside care. We prioritized sources that address three domains: objective assessment and management of oral malodor in clinical settings (2-8), descriptions and classification of olfactory reference presentations and their clinical burden (9-16), and evidence on reassurance seeking and related maintaining processes relevant to obsessive-compulsive presentations (17,18). Evidence was synthesized to derive practical steps, communication strategies and referral triggers rather than to estimate pooled treatment effects.

3. Results

Theme 1: objective testing has limits in subjective presentations. Halitosis is a measurable phenomenon, but measurement error, fluctuating oral conditions and contextual factors can complicate single-visit conclusions. A minimum dataset and, when feasible, confirmation at a second visit can improve diagnostic confidence (2-8). Once repeated, assessments remain normal and oral causes are optimized, continued testing rarely changes management and may inadvertently reinforce preoccupation.

Theme 2: high burden and repeated non-psychiatric help seeking. In clinical samples of olfactory reference syndrome, many patients seek repeated non-psychiatric medical, dental or surgical interventions, which are generally ineffective (11). This pattern mirrors some dental presentations in which patients pursue repeated periodontal debridement, excessive use of mouthrinses, frequent professional cleaning or cosmetic interventions in the hope of eliminating a perceived odor.

Theme 3: obsessive-compulsive maintenance processes. Contemporary descriptions position olfactory reference presentations within obsessive-compulsive and related disorders and highlight repetitive behaviours, such as checking, camouflaging and excessive washing (9-15). Epidemiological work using ICD-11-based features suggests that clinically significant symptoms may be more frequent than previously assumed in some young adult samples, underscoring the need for recognition and safe pathways (16). Reassurance seeking and checking can provide short-term relief, yet maintain long-term distress by increasing attention to threat cues and preventing belief disconfirmation (17,18). In dental practice, repeated confirmation that ‘there is no smell’ can function as reassurance and may unintentionally strengthen the cycle by making future reassurance more salient.

4. Discussion

We propose a chairside framework built on two principles. First, clinicians should complete a minimum objective dataset to exclude clinically meaningful malodor and to address treatable oral causes. Second, once exit criteria are met, the clinical task shifts from repeated odor investigation to structured management of subjective odor concern and, where appropriate, coordinated mental health referral.

Step 1: complete a minimum dataset and screen for red flags. A pragmatic dataset is outlined in Table 1. It emphasizes structured organoleptic scoring, periodontal screening, tongue assessment, salivary status and a focused history that includes medications and systemic symptoms (2-8). Red flags should prompt medical evaluation rather than repeated dental odor testing. Clear documentation at this stage makes the clinical reasoning transparent.

Table 1: Minimum chairside dataset and red flags for persistent oral malodor complaints

Component	Details
Objective assessment	Structured organoleptic scoring by a trained clinician; repeat on a second visit where feasible; consider portable sulphide monitoring when available (2,3).
Oral examination	Periodontal screening; tongue coating assessment and hygiene advice; caries and food retention factors; assessment of prostheses; xerostomia screening (2-8).
Focused history	Onset, triggers and fluctuation; dietary factors; smoking; medications; gastro-oesophageal symptoms; sinonasal symptoms; impact on functioning and avoidance.
Red flags for medical referral	Constitutional symptoms; dysphagia; persistent ulceration or bleeding; unexplained weight loss; febrile illness; suspected sinus infection; significant gastrointestinal alarm features.
Exit criteria for repeat odor testing	Consistently normal organoleptic and instrument findings across at least two visits, with oral causes addressed and no red flags present.

Step 2: communicate results using validating language. Patients may have experienced dismissal or ridicule. A useful approach is to validate distress while separating distress from odor evidence, for example: 'I can see how much this is affecting your life. Today's assessment shows no clinically significant malodor, and we have addressed the oral factors that could contribute. That means further breath testing is unlikely to help. Our focus now is to help you feel confident and function well again.' This framing reduces stigma and introduces a pathway rather than an endpoint.

Step 3: set explicit exit criteria for repeat testing. Repeated testing is rarely helpful once objective measures are consistently normal across at least two visits, oral causes are optimized and no red flags are present. We recommend agreeing an exit point, documenting it, and explaining that further odor testing will not be repeated unless new symptoms emerge. This prevents drift into indefinite reassurance appointments and encourages engagement with functional goals.

Step 4: identify features suggesting an olfactory reference presentation. Table 2 summarizes clinical features consistent with a perceptual-cognitive obsessive-compulsive odor concern formulation aligned with descriptions of olfactory reference disorder (9-16). Key indicators include time-consuming preoccupation, repetitive checking and camouflaging, avoidance, ideas of reference and a strong reassurance cycle. These features can be assessed with brief, non-judgemental questions about time spent thinking about odour, avoidance behaviours and impact on relationships and work.

Table 2: Features supporting a perceptual-cognitive obsessive-compulsive odor concern formulation

Feature	Clinical indicators
Persistent preoccupation	Frequent intrusive thoughts that breath is offensive despite reassurance and normal findings; substantial time occupied (9-16).
Repetitive behaviours	Checking breath repeatedly; excessive brushing; mouthwash overuse; repeated dental visits for odor confirmation; camouflaging with mints or perfume; excessive washing (9,12-15).
Avoidance and impairment	Avoiding close conversation; social withdrawal; occupational impairment; relationship strain (11,16).
Ideas of reference	Interpreting others' gestures as evidence of odour; scanning for reactions (11,14-16).
Reassurance cycle	Temporary relief after clinician confirmation followed by renewed doubt and repeat consultation (17,18).
Preferred referrals	Psychological therapy using cognitive behavioural approaches with exposure and response prevention; psychiatric assessment when insight is poor or comorbidity is significant (9,12-15).

Step 5: manage oral health while avoiding reinforcement. Oral health optimization remains appropriate even in subjective presentations: periodontal stability, tongue hygiene advice, management of xerostomia and avoidance of irritants can reduce oral sensations that trigger worry. However, clinicians should avoid escalating antimicrobial use or repeated procedures solely to provide reassurance. Excessive mouthwash use can cause mucosal irritation and dysgeusia, which may amplify symptom monitoring. A collaborative plan should specify what will be done, what will not be repeated, and why.

Step 6: referral and shared care. Evidence for cognitive behavioural therapy approaches, including exposure and response prevention, is emerging in olfactory reference presentations (12,17,18). Dental teams can support therapy by agreeing not to provide repeated odor reassurance, by reinforcing graded social re-engagement, and by liaising with mental health colleagues regarding triggers and oral sensations. Psychiatric assessment is advisable when insight is poor, when comorbidity, such as depression, is prominent, or when risk concerns arise, given reports of suicidal ideation in clinical samples (11,16).

4. 1 Terminology

We suggest that dental communications move away from labelling patients as 'halitophobic' and instead describe the presentation using neutral language, such as persistent subjective oral malodor concern, with consideration of olfactory reference disorder features when appropriate. This shift aligns dental practice with evolving psychiatric nomenclature and reduces the likelihood of stigma (9,13-16).

5. Conclusions

Persistent subjective oral malodor complaints with normal objective findings represent an interface problem that cannot be solved by breath testing alone. The term halitophobia does not capture the maintaining behavioural processes that drive ongoing impairment and can inadvertently promote repeated reassurance. A structured chairside framework with a minimum objective dataset, explicit exit criteria, careful communication and timely psychological referral can reduce iatrogenic harm and provide a clearer route to recovery.

Conflict of Interests

The author has no conflict of interests to declare.

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