

Original article

DELUSIONAL HALITOSIS IN A NIGERIAN PATIENT WITH DEPRESSIVE NEUROSIS AND A REVIEW OF THE LITERATURE

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ABSTRACT

BACKGROUND: Delusional halitosis is a psychiatric disorder characterized by persistent beliefs about malodour from the mouth. It is often associated with avoidance, humiliation, embarrassment and significant psychological distress.

OBJECTIVE: This report aimed at highlighting the relationship between delusional halitosis and psychopathology as well as reporting on the current collaborative management approach of such conditions.

CASE REPORT: A 40-year-old single, male patient presented with persistent bad breath of six months duration. He claimed that he brushed his teeth more than ten times daily and rinsed his mouth with various types of mouthwashes without any improvement. No bad breath was perceived using the organoleptic measurement and a diagnosis of delusional halitosis was made. He was referred to Consultant Psychiatrist who made a diagnosis of moderate depressive episode with psychotic features using a self-rating depression scale. The patient was treated with 25mg amitriptyline daily for 4weeks, then increased gradually to 75mg over 3months and weekly cognitive behavioural therapy for 12 weeks. There was remission after 3months and patient was placed on maintenance doze of 25mg amitriptyline daily for 12 months.

CONCLUSION: This report demonstrates that delusional halitosis can be associated with patients suffering from depression with psychotic features, which should be referred to the mental health expert for psychiatric or psychological interventions. Also, it supports collaboration between the dental practitioners and mental health experts in institutions where both departments exist.

Keywords: Delusional halitosis, depression, management, collaboration

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INTRODUCTION

Halitosis is also known as bad breath, mal-odour or foetor oris. It is an unpleasant and offensive odour from volatile sulphur compounds (hydrogen sulphide, methyl mercaptan) and volatile organic compounds or nonsulphur containing compounds (acetone, ammonia) present in the exhaled air of the individual with the condition. Previous documents have shown

that about 25% to 50% of the general population are affected with halitosis.¹⁻⁴ Halitosis has been classified into genuine halitosis, pseudo-halitosis and halitophobia.^{5,6} Pseudo-halitosis is a condition in which oral mal-odour does not exist contrary to the belief of the individual.⁶ while halitophobia manifests as an exaggerated fear of the presence of halitosis in the absence of one.⁶ The persistent abnormal beliefs that sufferers of

delusional halitosis experience could lead to decreased self-confidence, disturbing intimate relationships which could also result in social withdrawal, isolation, attempted suicide and even actual suicide.⁶ However, due to lack of insight and denial of the illness, individuals with delusional halitosis may refuse to visit the dentist or a psychiatrist.⁴

Previous studies have shown that the management of delusional halitosis requires a multidisciplinary team approach comprising of a dental practitioner preferably an oral medicine practitioner. Others involved in the management are periodontologist, family physician, ear-nose-and throat (ENT) surgeon, internist, clinical psychologist or a psychiatrist. However, the appropriate management is determined by the correct diagnosis of the type of halitosis.⁷

There have been reports on delusional halitosis in Nigeria but the ones that comorbid with depression are scanty.^{3-4,9,12-13} However, there is still a need to bring into awareness of practicing clinicians the presence of delusional halitosis among the Nigerian general population in order to manage the condition holistically. Therefore, this case report aimed at highlighting the relationship between delusional halitosis and mental illness, as well as reporting on the current collaborative management approach of such conditions.

CASE REPORT

A 40-year-old single, male, self-employed, freelance cinematographer presented with persistent bad breath of six months duration, at the Dental Outpatients' Clinic, Lagos State University Teaching Hospital, Ikeja, Lagos, Nigeria. He claimed that people around him were avoiding him because of his bad breath. For that reason, he had stopped interacting with people, stopped going to work, and kept mostly to himself. He claimed that he brushed his teeth more than ten times daily and also rinsed his mouth with various types of mouthwashes without any improvement.

General examination revealed a healthy-looking man with no facial asymmetry. On intraoral examination, no bad breath was perceived using

the organoleptic measurement. Gingivae and oral mucosa were pink and healthy looking. Oral hygiene status was fair with the presence of supra-gingival plaque only. Teeth present were healthy looking without caries, mobility or impaction. He was reassured and a treatment plan of routine oral hygiene procedure was carried out comprising of scaling and polishing of the teeth, with a motivational talk on oral hygiene practices. However, he returned a week later dissatisfied, and was looking sad. He insisted that he could still perceive bad breath from his mouth which made him to be further unhappy. Patient was diagnosed as a case of delusional halitosis.

He was thereafter referred to the psychiatric clinic where he was seen by a Consultant Psychiatrist. Who elicited complaint of anorexia, insomnia and social withdrawal from the patient and his mental state examination revealed a depressed mood with congruent affect. Despite being reassured repeatedly that he did not have bad breath, he kept his belief which was unshakeable. In order to confirm the suspected clinical diagnosis of depression, he was asked to complete the self-rating depression scale questionnaire.⁸ The findings of the administered instrument confirmed the diagnosis of moderate depressive episode with psychotic features.

He was subsequently placed on 25mg of amitriptyline daily for a period of four weeks. He also received weekly cognitive behavioural therapy for twelve weeks. The antidepressant was increased gradually to 75mg daily for another three months. After three months of treatment of the patient with psychotherapy and antidepressants, the delusion of halitosis and other symptoms of depression subsided. He was placed on maintenance therapy of 25mg of amitriptyline daily for another period of twelve months before he was finally discharged from the outpatient's clinic.

DISCUSSION

Recent study⁹ among patients seen in an oral medicine clinic in Nigeria indicated a prevalence of 12.9% of psychological halitosis, which falls within the range of 12 to 27% previously reported in patients seen in a halitosis clinic.¹⁴ This raises concern on the need for dentists to improve their skill and collaborate with mental health experts in

the management of psychological halitosis in our environment.

This case report highlights the management of a patient who reported initially to the dental clinic with a complaint of chronic bad breath and diagnosed as delusional halitosis. After routine dental examination and investigations, treatment was carried out without any improvement in the patient's condition. Hence, he was referred to the psychiatric unit for mental health assessment. The psychiatric assessment revealed that he had moderate depressive illness with psychotic features which also explained his delusional halitosis. Therefore, in this case, the delusion of halitosis was brought about by depression. Depression especially in its severe forms, apart from the persistent low mood, has been reported to bring about faulty olfactory and gustatory delusional perception, lack of confidence, negative self-image, social isolation and withdrawal.^{4,11}

Nonetheless, some authors have also established similarities between halitosis and other diseases such as olfactory reference syndrome which is characterized by persistent preoccupation about body odour accompanied by shame, embarrassment, significant distress, avoidance behaviour and social isolation.¹¹ In the same vein, the presence of bacteria in tongue coating could also cause genuine halitosis, in such cases, mechanical and chemical antimicrobial approaches were reported to be useful in the reduction of halitosis. It is therefore pertinent that oral microbiological assessment should also be carried out in cases of halitosis to rule out infective processes.⁹ In this reported case, the patient did not present with any organic condition and there was no evidence or history of an underlying disorder or infection. However, practicing clinicians especially the dental practitioners should carry out investigations such as plain skull x-ray, microscopy, culture and sensitivity test, structural brain imaging and gas-chromatographic analysis of body fluids to determine the normal range of body odours.¹¹ In the management of delusional halitosis, the stop-gap method of management has been proposed in the absence of mental health experts.¹²

However, when considering psychiatric management of halitosis, apart from cognitive behaviour therapy, pharmacotherapy with the use of selective serotonin reuptake inhibitor have been reported to be effective.^{4,13} Nonetheless, dental practitioners should administer their patients with psychometric screening instruments such as the general health questionnaire,¹⁵ dental anxiety scale,¹⁶ the dental behavioral inventory¹⁷ to rule out any comorbid psychological or psychiatric disorder.

In conclusion, this report demonstrates that delusional halitosis can be associated with patients suffering from depression with psychotic features, which should be referred to the mental health expert for psychiatric or psychological interventions. Also, it supports collaboration between the dental practitioners and mental health experts in institutions where both departments exist.

Conflict of Interest: None declared

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