

## Case Report

# Comprehensive Dental Sciences and Schizophrenia - Challenging the World of Hallucinations and Delusions

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**Abstract:** Here we present a case report of a patient diagnosed with paranoid schizophrenia with poor oral hygiene maintenance and we emphasize in the importance of oral hygiene maintenance in such patients.

**Keywords:** Oral manifestations, schizophrenia, caretaker

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## INTRODUCTION

Oral manifestations of systemic diseases are frequently neglected or under diagnosed which in turn impacts the general health of an individual (Lang, H. C., & Su, T. P. 2004). Oral health care is of particular concern in mentally challenged and institutionalized patients, as poor oral hygiene predisposes them to various systemic health problems like respiratory infections and cardiac ailments. Schizophrenia is a chronic and severe mental disorder affecting 20 million people worldwide (GBD. 2017). It is a chronic mental disorder with exacerbations and remissions, characterized by impaired thought processes, emotional responsiveness, which leads to social and occupational disability of patients. Therefore, it is a burden for both the patient and their family and it is the disease of great public health importance. Oral manifestations of systemic diseases are frequently neglected or under diagnosed which in turn impacts the general health of an individual (Lang, H. C., & Su, T. P. 2004). Oral health care is of particular concern in mentally challenged and institutionalized patients, as poor oral hygiene predisposes them to various systemic health problems like respiratory infections and cardiac ailments. Schizophrenia is a chronic and severe mental disorder affecting 20 million people worldwide (GBD. 2017). It is a chronic mental disorder with exacerbations and remissions, characterized by impaired thought processes, emotional responsiveness, which leads to social and occupational disability of patients. Therefore, it is a burden for both the patient and their family and it is the

disease of great public health importance. Disturbances in thought process, behavioral changes, impaired cognitive functions affects a person's ability to work or communicate socially and leads them incapable of selfcare characterize schizophrenia (Friedlander, A. H., & Marder, S. R. 2002). It is often associated with positive and negative symptoms. Positive symptoms being hallucinations, conversing voices, paranoid delusions whereas 'negative' symptoms are flattened affect, loss of a sense of pleasure leading to social withdrawal, isolating the patient who eventually loses the will or drive to perform routine activities (Schultz, S.H. et al., 2007; & American Psychiatric Association. 1994). Recent studies have pointed to the increased prevalence of caries and periodontal disease in psychiatric patients compared to mentally healthy individuals. Poor self-care, neglected oral care, low perception of dental treatment needs, and poor diet may contribute to ill oral health in such patients. Tremors interfere with day to day fine motor skills of the patient, impairing one's tooth brushing leading to poor oral health. Therefore routine dental care becomes a challenging task for the patient, caretaker, and the physician. Oral health should be given importance of patients.

## CASE REPORT

A 50 year old female reported to the dental OPD with a chief complaint of pain in the upper right back tooth region for the past two weeks. Her history revealed that she was diagnosed with paranoid

schizophrenia six months ago by a psychiatrist. She had started to develop depression due to domestic conditions and personal problems after which she had started to develop hallucinations of a divine presence in her house, this problem deterred her from engaging in her day to day activities and social life. The family consulted psychiatrist for which she was admitted in a psychiatric institution. She was placed on antidepressant medication (Clozapine 100 mg) for the past 6 months. Further clinical history revealed that she was hypertensive and diabetic for which he was under regular medication. She had also been under anticoagulant medication for the past 2 years due to angiogram. Two weeks prior to current dental visit, she had started developing discomfort and pain in upper back tooth region. Clinical examination revealed generalized plaque calculus deposits and the pain localised to the region of 16 after carrying out tender on percussion test. The patient did not give consent for taking photographs. She was advised a panoramic radiograph to evaluate the dental condition. However, before initiating the treatment, she was advised to obtain fitness certificate from the psychiatrist, cardiologist and general physician to proceed with the procedure. We are awaiting the fitness certificate to proceed further in her treatment.

## DISCUSSION

While managing patients with this chronic illness, dentists are entitled to take utmost care of the oral hygiene. A thorough history regarding the patient's oral hygiene practices, medical history, parafunctional and other abusive habits, medications as well as attitude of the patient's family towards oral health should be taken into consideration. The patient should be dealt empathetically and treated like any other patient. Good communication and rapport should be more emphasized in gaining the patient's and the caregivers trust. Priority should be given to counseling of the care takers, oral prophylaxis, restoration of decayed teeth, oral rehabilitation of edentulous patients and any emergency treatment possible.

Jovonovi *et al.*, showed that dental care associated behavior assessment in 372 psychiatric inpatients showed that these patients have less impetus to visit a dentist. They brushed their teeth for shorter periods and did not realize that oral health may have an influence on their general health condition (Jovanović, S. *et al.*, 2010).

Routine oral prophylaxis can be performed. Surgical procedures like root planing and flap surgeries are not a contraindication but are expected to be performed after obtaining a fitness certificate and necessary precautions in patients who are stable and under medication. Health care professionals should be trained and updated regarding the oral diseases, side effects of medications, and possibility of dental

treatment for these chronically ill patients. Schizophrenic patients should not be refused treatment on grounds of inability to maintain oral hygiene.

Tremors have been observed as side effects of antipsychotic medications (Holloman, L. C., & Marder, S. R. 1997). A cross sectional study evaluated the association between tremors and poor dental hygiene. Tremors interfere with day to day fine motor skills of the patient, impairing one's tooth brushing, hence again leading to poor oral health (Tani, H. *et al.*, 2012). Demanding household and harsh community environments may be responsible for poor access to social services like health care and education, often leading them to social exclusion (Werner, S. *et al.*, 2007).

A study in institutionalized patients found the oral hygiene to be poorer in schizophrenic patients most commonly due to lack of self hygiene, neglect and impaired motor skills in severe cases (Kenkre, A. M., & Spadigam, A. E. 2000). patient with schizophrenia are subjected to hyposalivation, some of the adverse effects caused by anti psychotic medication (Clark, D. B. 2008).

## CONCLUSION

The knowledge and awareness of different aspects of this disease by the dental practitioner along with coordination with general physicians and psychiatrist should aid in planning of better treatment strategies for the affected individuals. Since they are more susceptible to higher rates of tooth decayed, gingivitis and periodontitis than the general population, More attention should be given to the oral health of psychiatric patients. A protocol for routine oral examinations and treatment should be applied for psychiatric patients during their follow up visits. Preventive oral treatment should be advised and carried out before starting psychiatric medications.

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