International Journal of Current Research and Review
DOI: https://doi.org/10.31782/IJCRR.2021.13637

Scopus

Case Report

IJCRR
Section: Healthcare
ISI Impact Factor (2019-20): 1.628
IC Value (2019): 90.81
SJIF (2020) = 7.893

Anxiety and Stress Induced Xerostomia and It's Management: A Case Report

Poonam Rai[1], Yashashree Chande[2], Mancy Modi[3], Bhargavi Sheth[4], Devanshi Shah[4], Shamit Thaper[4]

[1]Professor, Department of Periodontics and oral Implantology, Dr. D.Y. Patil University School of Dentistry, Nerul, Navi Mumbai, M.S., India; [2]Lecturer, Department of Periodontics and oral Implantology, Dr. D.Y. Patil University School of Dentistry, Nerul, Navi Mumbai, M.S., India; [3]Associate Professor, Department of Periodontics and oral Implantology, Dr. D.Y. Patil University School of Dentistry, Nerul, Navi Mumbai, M.S., India; [4]Post-graduate student, Department of Periodontics and oral Implantology, Dr. D.Y. Patil University School of Dentistry, Nerul, Navi Mumbai, M.S., India.

ABSTRACT

Introduction: A 26-year old man complained of dry mouth, difficulty in speech, chewing and intake of food. An in-detail medical history and physical examination revealed that due to his financial constraints at home, the patient is under constant stress, which may have caused this condition. Moreover, a tendency of snoring while sleeping which is probably stress related, may be contributing to his uncomfortable state.

Aims: The aim of this report is to probe into the knowledge on management and treatment of patients affected by xerostomia.

Case Report: A 26 years old man reported to the out-patient Department of Periodontology and reported with a chief complaint of a dry mouth, with difficulty in speech, swallowing and intake of food. The above symptoms were noticed starting 2 years back, when his family started facing financial constraints, due to which the patient felt constantly pressured and stressed.

Discussion: Lot of patients experience difficulty while eating food which is of dry or hard consistency, they are left with no other option but to switch to a soft consistency diet.

Conclusion: Xerostomia when neglected can adversely impact the Oral-Health-Related Quality of Life (OHRQoL) of a patient.

Key Words: Xerostomia, Salivary flow, Among elderly, Quality of Life, Complexity, Periodontology

INTRODUCTION

The term "Xerostomia", is a well versed complaint, accompanied by a dry mouth which could be linked to objectively gauged, decreased salivary flow. Various studies have shown that xerostomia is related to a variety of aspects which include local or systemic conditions[1,2] and hence, the severity of salivary insufficiency, and the complexity of mouth dryness, differs. All these reasons make it's remedy compounded, and have a prolonged time duration to achieve it's treatment and sustain it's steadiness. Moreover, the condition is usually aggravated among elderly patients as they could be suffering different ailments and take a variety of different drugs which could lead to reduced salivary flow[1,3]

CASE REPORT

A 26 years old man reported to the out-patient Department of Periodontology and reported with a chief complaint of a dry mouth, with difficulty in speech, swallowing and intake of food.

The above symptoms were noticed starting 2 years back, when his family started facing financial constraints, due to which the patient felt constantly pressured and stressed. The patient has also reported a frequent habit of snoring while sleeping since the past 2 years, which could likely be co-related to his stress since the patient did not mention any history of snoring before 2 years.

Upon extra-oral investigation, no enlargement of the salivary glands or lymph nodes was observed. Intra-orally, good oral hygiene and plaque control was observed. The oral mucosa appeared dry and glossy. Fissures were seen on the tongue. The lips were dry and parched.

Upon examination carried out by the draining method, low unstimulated whole salivary flow rate of 0.07 ml per minute (abnormally less than 0.1)[4] was seen. Other blood investiga-

Corresponding Author:
Dr. Poonam Rai, Professor, Department of Periodontics and oral Implantology, Dr.D.Y. Patil University School of Dentistry, Nerul, Navi Mumbai, M.S., India; Email: poonam.rai@dypatil.edu

ISSN: 2231-2196 (Print) **ISSN:** 0975-5241 (Online)

Received: 18.11.2020 **Revised:** 20.12.2020 **Accepted:** 18.01.2021 **Published:** 20.03.2021

tions which included Erythrocyte Sedimentation Rate, Complete Blood Count (CBC) and Immunology showed standard results. Also, the level of glucose in the urine and ultrasound of the salivary glands were not unusual or abnormal.

The patient was diagnosed with Xerostomia based on the data obtained from his medical history and investigations. False xerostomia induced by stress and anxiety which was aggravated by mouth breathing (snoring at night) has contributed to the dryness of the oral cavity.

TREATMENT

A definite course of action was planned for the patient, inorder to control his symptoms. To start with, the patient was referred to a counsellor of a government hospital keeping his financial constraints in mind.

It is an established fact that yoga and meditation balances the mind and hormonal systems of the body. Hence, he was asked to practice mindfulness and yoga which would help him calm down and would teach him to deal with his stress and anxiety in a much better and efficient manner. He was also asked to change his dietary habits , where he was told to refrain from eating sticky, acidic, hard and dry foods, followed by regular sipping of water at short intervals.

Various salivary lubricants and substitutes (Wet Mouth and AQWET) were advised. Sugar free, candies, gum and Xylitol-containing mints were emphasized upon, to increase the flow of saliva.

RECALL VISIT

The patient was recalled after 3 weeks. He reported an improvement in the dryness of his mouth with the help of the salivary substitute 'Wet Mouth' and also due to his regular intake of water at short time intervals. His lips were less parched and the left and right buccal mucosa appeared less glossy.

He also mentioned how his regular counselling is helping him deal with his anxiety and stress and how yoga had helped him be more calm and mindful.

DISCUSSION

Dryness of the mouth or xerostomia, is defined as a subjective sensation and the most common complaint pertaining to the oral cavity, its prevalence about 0.8% to 63.9% worldwide[5] and is known to have a considerable effect on the patients' Health Related Quality of Life (HRQoL). Lot of patients experience difficulty while eating food which is of dry or hard consistency. Hence, they are left with no other option but to switch to a soft consistency diet. These patients need to frequently sip water while chewing or swallowing causing a discrimination in taste.[6]

Hyposalivation is defined as an objective reduction in the salivary flow rate. About 42.8% patients suffering from dry mouth, had psychological disorders. Depression can decrease the salivary secretion by stimulating the anticholinergic mechanism. Under stress,salivary cortisol levels increase negatively affecting the salivary secretion. Bergdahl and Bergdahl evaluated 1202 individuals in three groups and it showed Xerostomia was observed more in patients with higher DAS (Depression Anxiety Stress Scales). Also, sleep related disorders have a significant co-relation with a reduction in flow rate of saliva.[7,8]

The objectives of xerostomia management is to decrease and provide relief to the patient's symptoms and/or increase the flow of saliva. The easier management consists adequate rehydration and increasing the humidity of the oral cavity at night by drinking water before sleeping. Intraoral topical agents are amongst the most common recommended treatments for xerostomia management.[9]

CONCLUSION

Xerostomia when neglected can adversely impact the Oral-Health-Related Quality of Life (OHRQoL) of a patient. We as dentists, can help reduce the effect of stress induced xerostomia[10]through a comprehensive attitude which includes dental health education, referral to Psychiatrist, quick diagnosis and appropriate treatment, thus enhancing the overall Quality of Life for the patient.

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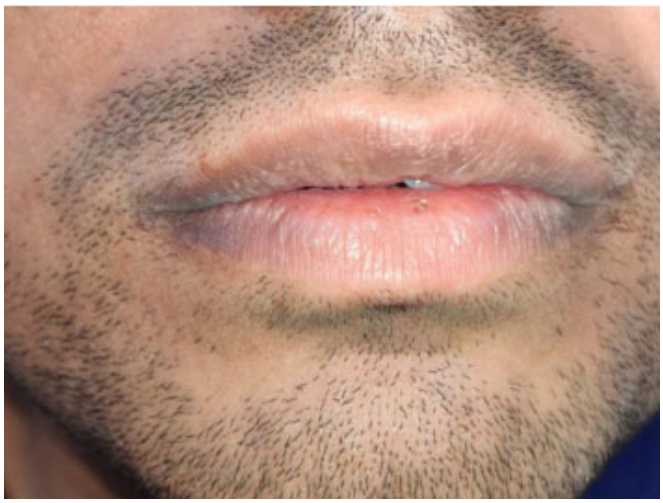

Figure 1: Dry and parched lips.

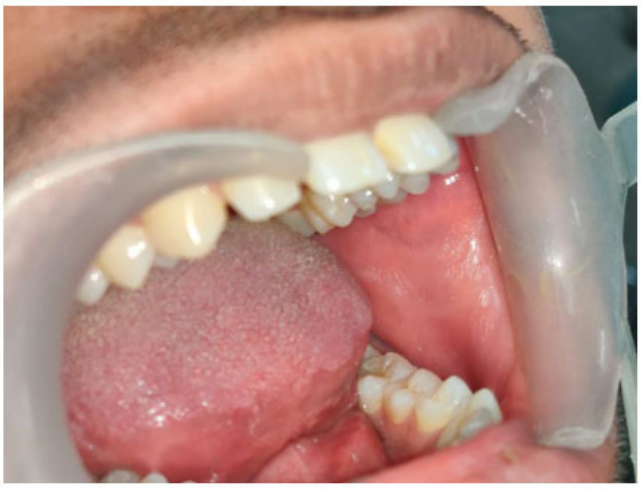

Figure 2: Glossy appearance of left buccal mucosa.

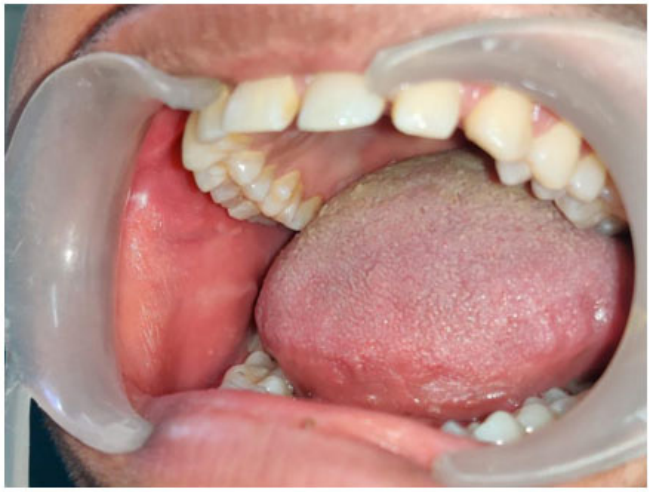

Figure 3: Glossy appearance of right buccal mucosa.

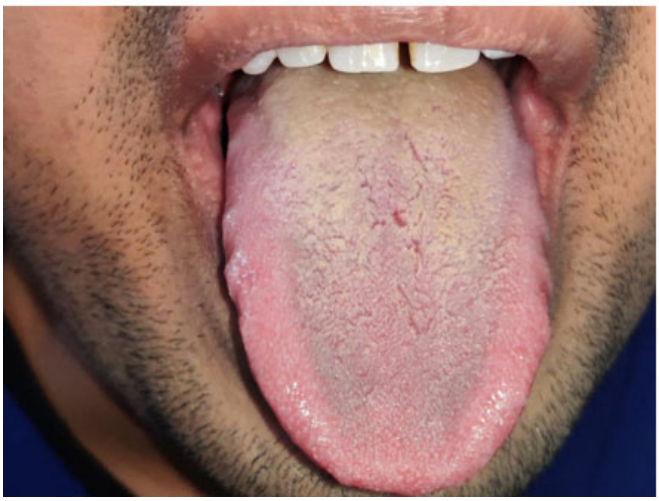

Figure 4: Fissures seen on the tongue.