Management Strategies for Patients with Xerostomia (Dry Mouth)

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ABSTRACT

Objective: To discuss management strategies for patients presenting in the clinical setting with xerostomia (dry mouth). Xerostomia is a multifactorial problem that many times is disabling for the individual and challenging to manage. A 66 year old Caucasian female patient presented to the dental hygiene clinic with a chief complaint of “constant dry mouth”. The patient’s medical history indicated a previous habit of smoking along with a current history of asthma, chronic obstructive pulmonary disease, and oral candidiasis infection. Contributing factors to the patient’s dry mouth include: the use of a CPAP machine at night, oxygen during the day, and two prescription medications whose side effects cause dry mouth (Zoloft and Spiriva). Upon examination this patient was determined to be high caries risk with evidence of a new carious lesion on the mesial aspect of tooth #27. The iteration of meticulous home care is an important role of the clinician in order to alleviate discomfort, taste disturbances, sore mouth, and to prevent future decay and candidiasis infections. Other recommendations that were given in order in combat dry mouth included: use of high fluoride toothpaste (PreviDent 5000), ACT dry mouth rinse, and ACT dry mouth lozenges. It is also important for this patient to drink eight glasses of water a day, avoid sugar containing beverages, and chew sugar-free gum to stimulate saliva. The patient’s overall quality of life can be improved if clinicians are able to properly recognize xerostomia and recommend personalized management routines.

INTRODUCTION

Xerostomia is defined as less than 1.5 ml unstimulated salivary flow in 15 minutes. Saliva is vital to the oral cavity to help clear debris and plaque from the teeth and aid as a buffer against acidity in the mouth. Due to a lack of salivary flow, xerostomic patients may have rampant dental caries. Other oral effects include dysgeusia (altered taste perception), dysesthesia (speech difficulties), burning mouth, dysphagia (difficulty swallowing), odynophagia (painful swallowing), foul taste, halitosis (bad breath), and fungal infections. Patients with xerostomia will many times present with enlarged salivary glands and intra-oral candidiasis and/or angular chelitis. The oral mucosa appears shiny and dehydrated and the dental mirror may stick to the tissues. Patients with xerostomia must maintain regular dental therapy appointments in order to maintain optimal dental health. Radiographs must be prescribed periodically in order to detect decay. This condition is seen by dental hygienists on a daily basis. It is our obligation to provide quality care to these patients, prevent future caries, and alleviate discomfort. Patients are living longer and it is likely that the future of dentistry will deal more with patients who have dry mouth and management of this condition will become more complex.

ASSESSMENT

A 66 year old Caucasian female patient presented to the dental hygiene clinic for her 6 months recall appointment for dental hygiene therapy. This patient had previously had scaling and root planning in 2011 and presented for periodontal maintenance and exam. She reported having “constant dry mouth.” Clinical decay was found on the mesial #27. Her medical history showed that she had a history of hypertension, asthma, atrial fibrillation, cancer, chemotherapy, COPD, congestive heart failure, rheumatoid arthritis, and depression. This patient uses a CPAP machine at night and oxygen during the day. In order to make the patient comfortable, the clinician modified treatment by only leaning the patient halfway back in the chair to support her respiratory condition.

DENTAL HYGIENE TREATMENT PLAN

The determined treatment plan was Periodontal maintenance (D4910) based on the patients history of scaling and root planning and current periodontitis evidenced by 4-5mm CAL. This patient’s plaque score was 32%. The patient reported that her frequency of flossing was “seldom” and she usually brushed 2x/day. Oral hygiene instruction consisted of educating patient on Bass brushing method, brushing of the tongue, c-shape shaped flossing, and using a reach flosser. Patient responded to the recommendations well. Upon DDS examination a new carious lesion was found on the mesial of #27 and restorative work on #7 was indicated for cosmetic reasons. High caries risk was establish for this patient due to her present decay and xerostomia conditions. This patient also stated that she frequently sipped on sweetened beverages in between meals and occasionally snacked on candy. Preventive measures include: use of high fluoride toothpaste, use of an “ACT dry mouth” lozenges or sugar free gum to stimulate saliva. The patient should be tailored to “Xerostomia” lozenges or sugar-free candies. It is also important for these patients to avoid sugar containing beverages, chew sugar-free gum to stimulate saliva, and maintain adequate hydration by drinking eight glasses of water per day. Temporary relief from xerostomia can be accomplished by sipping water, sucking on ice, and using a humidifier during sleep. Tobacco use is associated with dry mouth and the use of these products should be minimized or eliminated all together. The clinician should be able to assess tobacco use, document oral mucosal changes, and incorporate tobacco cessation counseling. Frequent dental visits every three to six months is recommended for these patients due to their high risk of developing caries and secondary infections (i.e.: candidiasis). If the patient’s unstimulated salivary flow is less than 1.5 ml in 15 minutes, pharmacotherapy with salivary stimulants such as pilocarpine and cevimeline may be prescribed. Pilocarpine should be used four times per day at 5 milligrams and cevimeline is 30 mg three times per day. If the patient adheres to all of the clinicians recommendations the individuals will experience a more satisfying oral environment.

EVALUATING XEROSTOMIC PATIENTS

CONCLUSION AND MANAGEMENT

Treatment planning for the xerostomic patient should be tailored to the individual’s needs. Patient education is of the utmost importance for these patients. Information should be given regarding the potential sequelae of xerostomia including: caries, mucosal complication, and oral candidiasis. Emphasis should be put on daily oral hygiene regimen including brushing twice-daily, regular use of floss or other interdental cleaner, and use of an alcohol-free mouthrinse. Consultation with the patient's physician may be considered if the dry mouth symptoms are likely caused from a systemic disease or due to medical treatment (i.e.: radiation therapy or prescription drugs-see table 3). Preventive measures are necessary for optimal care of patients with dry mouth. Preventive measures include: use of a high fluoride toothpaste, use of a "dry mouth" rinse, and "dry mouth" lozenges or sugar-free candies. It is also important for these patients to avoid sugar containing beverages, chew sugar-free gum to stimulate saliva, and maintain adequate hydration by drinking eight glasses of water per day. Temporary relief from xerostomia can be accomplished by sipping water, sucking on ice, and using a humidifier during sleep. Tobacco use is associated with dry mouth and the use of these products should be minimized or eliminated all together. The clinician should be able to assess tobacco use, document oral mucosal changes, and incorporate tobacco cessation counseling. Frequent dental visits every three to six months is recommended for these patients due to their high risk of developing caries and secondary infections (i.e.: candidiasis). If the patient’s unstimulated salivary flow is less than 1.5 ml in 15 minutes, pharmacotherapy with salivary stimulants such as pilocarpine or cevimeline may be prescribed. Pilocarpine should be used four times per day at 5 milligrams and cevimeline is 30 mg three times per day. If the patient adheres to all of the clinicians recommendations the individuals will experience a more satisfying oral environment.

REFERENCES