Excerpt from Saliva and Oral Health - An Essential Overview for the Healthcare Professional

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Saliva and Oral Health

Saliva plays a significant role in the maintenance of oral health and wellbeing. Subjective symptoms and complaints of dryness in the mouth (xerostomia) are associated with many systemic conditions. Severe reduction of saliva production increases the risk of developing dental decay. Salivary hypofunction associated root surface caries is a particular risk and, without diagnosis and treatment and, therefore, identification of patients at risk will result in demineralisation and will need to be taken to preserve the dentition.

With deficient salivary function, dental erosion is a more frequent occurrence in patients with salivary gland hypofunction who may eat acidic foods or chew on soft sugars or sugar-free chews. This may lead to the development of erosion and erosion in patients with salivary gland hypofunction. The first step in the management of this condition is to diagnose and treat the underlying cause.

The increase in salivary output during and immediately after chewing may be used to assess salivary gland function. If normal, saliva is expected to precipitate the underlying cause. The volume of saliva collected over a specific period of time is recorded as ml/min.

Values below 45% of normal levels can be used to determine salivary gland hypofunction. It is also generally accepted that when xerostomia is severe, the saliva flow rate is less than 0.5 ml/min. However, there is substantial individual variability in flow rates that makes it difficult to define diagnostic criteria for salivary gland hypofunction.

In patients considered to be at risk, for developing salivary gland hypofunction, it would be useful to monitor salivary flow rates over time. Most investigators consider a diagnosis of salivary gland hypofunction if the saliva flow rate is less than 0.1 ml/min using standardised techniques, neutrophilic, neutrophilic and neutrophilic and neutrophilic enzymes. In patients considered to be at risk for developing salivary gland hypofunction, the saliva flow rate is less than 0.1 ml/min using standardised techniques, neutrophilic, neutrophilic and neutrophilic enzymes. In patients considered to be at risk for developing salivary gland hypofunction, the saliva flow rate is less than 0.1 ml/min using standardised techniques, neutrophilic, neutrophilic and neutrophilic enzymes.

Clinical implications of xerostomia and salivary gland hypofunction

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and mints can stimulate salivary glands, stimulation particularly between meals. Patients must be counselled on a well-balanced, nutritionally adequate diet. Accordingly, adults to a primarily soft and foods, restricting some older patients must be instructed on prevent dental caries.

Maintenance of proper oral hygiene and hydration (water is the drink of choice) are helpful. Several habits, such as smoking, mouth breathing, and consumption of caffeine containing beverages, have been shown to increase the risk of xerostomia. Limiting or stopping these practices should lessen the severity of dry mouth symptoms. A low sugar diet, daily topical fluoride use (e.g. fluoride toothpaste and mouth rinses), antimicrobial mouth rinses, and use of sugar-free gum or candy to stimulate salivary flow, help to prevent dental caries.

Pain management is instructed on the frequent use of fluids during eating, particularly for dry and rough foods. Eating and swallowing problems secondary to salivary gland hypofunction can impair the intake of fibre-rich foods, restricting some older adults to a primarily soft and carbohydrate diet. Accordingly, patients must be counselled on a well-balanced, nutritionally adequate diet and the importance of limiting sugar intake, particularly between meals.

If there are remaining viable salivary glands, stimulation techniques using sugar-free chewing gum, candies (sweets), and mints can stimulate salivary output. Chewing sugarless gum is an extremely effective and continuous salivary substitute, since it increases salivary output and increases salivary pH and buffer capacity. Buffered xylitol-containing chewing gums or mints are often recommended, because xylitol has an anti-cariogenic effect.

Conclusion Saliva not only plays a pivotal role in the maintenance of a healthy homeostatic condition in the oral cavity, but contributes to one’s overall health and well-being. Components from saliva interact in different ways with the dentition to protect the teeth. Patients who lack sufficient saliva suffer from many oral diseases, of which caries is only one. To alleviate discomfort they are advised to use saliva stimulants and substitutes which have the function of lubricating the oral surfaces. Chewing sugar free gum is increasingly being viewed as a delivery system for active agents that could potentially provide direct oral care benefits, as it promotes a strong flow of stimulated saliva.


*Underwriting costs for this Saliva and Oral Health edition were provided by Dr. Michael Dodds and The Wrigley Company.

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