

Medications can affect oral health

There are more than 500 medications known to cause xerostomia, a subjective feeling of daily oral dryness that often impairs functions such as swallowing and speech. Medications most commonly associated with dry mouth are ones with anticholinergic or sympathomimetic effects, including tricyclic antidepressants, antipsychotics, benzodiazepines, atropines, beta-blockers, and antihistamines.

When managing chronic pain with long-term opioid analgesic therapy, please warn patients that dry mouth is a potential side effect and advise them to consult with their dentist for regular follow-up.

Establishing a relative risk for xerostomia as a result of a specific medication is difficult due to contributing factors such as the severity of concomitant adverse reactions, the pathophysiology of the disorder being treated, and the dose of medication. Regardless, the risk of xerostomia increases with the number of medications taken, and becomes especially high when more than three different drugs are taken per day.

This article is the opinion of WorkSafeBC and has not been peer reviewed by the BCMJ Editorial Board.

The role of saliva

Saliva plays an important role in the health of soft and hard tissues in the oral cavity. Its primary functions include a rinsing effect, food and bacterial clearance, dilution, lubrication of dental surfaces, protection of teeth by neutralization of acid by buffering actions, and antimicrobial defense. A chronically low salivary flow rate has been found to be a strong indicator for increased risk of developing oral disease and discomfort, which can affect overall health.

Low salivary flow rate is one of the risk factors for developing dental caries, a chronic, transmissible disease of bacterial origin. Dental caries is the result of an etiologically complex disease process that involves the host (saliva and teeth); microflora (plaque); substrate (diet); and time. The existence of bacterial plaque on the teeth is a prerequisite for caries development and therefore regular removal of plaque from tooth surfaces will reduce caries risk.

In addition to low salivary flow rate, other risk factors for developing dental caries include diet (frequency and types of fermentable carbohydrates consumed); oral hygiene status

(amount of plaque in the oral cavity and compliance of patients' oral hygiene habits); and microbial load (type and amount of caries-causing bacteria). Therefore, individuals suffering from xerostomia, or taking medication that may cause xerostomia, must be educated in ways to maintain oral health.

Oral health

In addition to encouraging your injured worker patients to visit their dentist regularly as part of an overall health plan, if you are prescribing medication that could potentially cause dry mouth, please also emphasize the importance of maintaining a healthy oral environment. Limiting the consumption of fermentable carbohydrates to meal times when saliva is most plentiful in the mouth, and drinking plenty of water, rather than sugary or acidic beverages, such as carbonated soft drinks and sports drinks, may be helpful.

For more information about good oral health, visit the Canadian Dental Association website at www.cda-adc.ca.

—**Alison D. Kaplen, DMD**
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