



MEDICATION-INDUCED XEROSTOMIA

Saliva plays an important role in oral and overall health. Unfortunately, many individuals experience xerostomia, commonly known as dry mouth, which may contribute to serious oral conditions, such as dental caries, oral infections, and ulcerations, and lead to pain, discomfort, and difficulty swallowing.^{1,2} Xerostomia can be associated with salivary gland dysfunction, dehydration, chemotherapy, radiation therapy involving the head and neck, and several diseases. It is also a common adverse effect of many medications and supplements. Older adults are particularly vulnerable to medication-induced xerostomia because of the high prevalence of chronic disease in this population; over three-quarters of the older population take medications that can disturb salivary gland function.^{3,4} While this list is not exhaustive, the following types of medications are frequently associated with dry mouth.^{2,5-7}

MEDICATIONS ASSOCIATED WITH XEROSTOMIA

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|--------------------|----------------------|-----------------|
| Antianxiety Agents | Antihypertensives | Bronchodilators |
| Anticholinergics | Antiinflammatory | Decongestants |
| Anticonvulsants | Antiparkinson Agents | Diuretics |
| Antidepressants | Antipsychotics | Sedatives |
| Antihistamines | Analgesics | |

Dental hygienists play an important role in the prevention, early detection, and identification of potential underlying causes, and the treatment of problems associated with xerostomia. Comprehensive medical histories, intra and extra oral assessments, and systematic approaches to xerostomia management can facilitate effective individualized interdisciplinary client care.



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The management of medication-induced xerostomia and hyposalivation should emphasize client education, lifestyle modifications, and palliative and preventive measures, which may include^{2,8,9}:

- Optimal daily plaque control
- Topical fluoride therapy for individuals at risk for dental caries
- Salivary replacement and stimulants (OTC and/or prescribed therapies)
- Frequent sipping of water throughout the day, use of sugar-free chewing gum and/or lozenges, and avoidance of acidic and sugary items
- Antimicrobial therapies, as needed
- Reduction or discontinuation of tobacco use
- Monitoring of oral and systemic conditions, in collaboration with other health care providers

REFERENCES

1. Ekström J, Khosravani N, Castagnola M, Messina I. Saliva and the control of its secretion. In: Ekberg O (ed) *Dysphagia: diagnosis and treatment*. Berlin: Springer; 2012. pp 19–47.
2. Darby M, Walsh MM. *Dental hygiene, theory and practice*. 4th Ed. St. Louis (MO): Saunders; 2014.
3. Burr AB, Lee HJ. Social Relationships and Dental Care Service Utilization Among Older Adults. *J Aging Health*. 2013; 25:191-220.
4. Thomson WM, Ikebe K, Tordoff JM, Campbell AJ. Dry mouth and medications. In: MacEntee MI, Muller F, Wyatt CC, (eds). *Oral healthcare and the frail elder: a clinical perspective*. Ames (IA): Wiley-Blackwell Publishing Ltd; 2010. pp. 51–71.
5. Canadian Pharmacists Association. *Compendium of pharmaceuticals and specialties* [online version, e-CPS]. Ottawa: CPhA; 2015.
6. Nguyen CT, MacEntee MI, Mintzes B, Perry TL. Information for physicians and pharmacists about drugs that might cause dry mouth: A study of monographs and published literature. *Drugs Aging*. 2014;31:55-65.
7. Scully C. Drug effects on salivary glands: dry mouth. *Oral Dis*. 2003;9(4):165-76.
8. Atkinson JC, Grisius M, Massey W. Salivary hypofunction and xerostomia: diagnosis and treatment. *Dent Clin North Am*. 2005;49(2):309-26.
9. Furness S, Worthington HV, Bryan G, Birchenough S, McMillan R. Interventions for the management of dry mouth: topical therapies. *Cochrane Database of Systematic Reviews* 2011, Issue 12. Art. No.: CD008934. DOI: 10.1002/14651858.CD008934.pub2.