

Dental note

Oral and dental effects of antidepressants

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Patients treated with antidepressant drugs may experience a dry mouth. Other drugs associated with dry mouth include antihistamines, anticholinergics, antihypertensives and antipsychotics. These drugs may cause salivary gland hypofunction, or may alter the threshold for the perception of dry mouth or they may do both.¹ Older patients appear to be more at risk of a drug-induced dry mouth, with greater salivary gland hypofunction, compared to younger adults.²

Among the antidepressant drugs, tricyclic antidepressants are associated with a higher incidence of dry mouth than selective serotonin reuptake inhibitors (SSRIs).³ In a study of parotid gland salivary flow rates, patients taking tricyclic antidepressants had a 58% reduction in flow rates compared with untreated controls, while the flow rate was reduced by 32% with SSRIs.³

Patients with a dry mouth may complain of associated dryness of the lips and throat, oral soreness or burning, altered taste sensations and halitosis. They may find chewing, swallowing and speaking difficult. The risk of candidosis is increased.⁴ The lack of an adequate salivary film between dentures and underlying gums can impair retention of dentures, and the lack of salivary lubrication can lead to denture-induced mucosal ulceration.

Saliva acts to buffer organic acids produced by dental plaque and maintains a remineralising environment within the oral cavity to preserve the teeth. A reduction in salivary flow rates is therefore thought to increase the risk of dental caries.⁵ Patients with a dry mouth will often try to alleviate their symptoms by sucking sweet confectionery, chewing sugar-containing gums or by drinking cariogenic and acidic beverages. All of these can further increase the risk of tooth surface demineralisation and caries.

When patients are starting an antidepressant, it is important to inform them of the potential risk of developing a dry mouth and its possible adverse effects. Therapeutic Guidelines: Oral and Dental⁶ recommends that before treatment patients should have a dental check-up followed by treatment of any active dental disease. Instruction in oral hygiene (and denture hygiene if dentures are used) should be given. Review appointments, to assess the oral and dental status, should be at 3–6 monthly intervals.

Therapeutic and preventive strategies are recommended to manage the oral and dental effects of dry mouth. Dental management involves the use of products that promote remineralisation of the teeth as a means of preventing caries. This may involve the use of topical fluoride applied in the dental surgery or the use of fluoride rinses or a high-strength fluoride toothpaste.⁶ Use of a casein phosphopeptide-amorphous calcium phosphate (CPP-ACP) cream is also recommended for remineralisation.⁶ For both the high-strength fluoride toothpaste and the CPP-ACP cream, a 'spit don't rinse' strategy is recommended following application to the teeth.

In the management of dry mouth, oral lubricating gels or artificial saliva may be used for the transient relief of symptoms. Chewing of sugarless gum or CPP-ACP gum to stimulate saliva flow may be helpful. Therapeutic Guidelines: Oral and Dental⁶ contains practical advice for patients with dry mouth and advises patients to avoid acidic beverages such as wine, fruit juices, soft drinks and sports drinks. They should limit their sugar intake and avoid sugary snacks in order to reduce the potential for demineralisation and caries. Use of a bicarbonate mouthwash is recommended on waking and at any time during the day for symptomatic relief.⁶

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REFERENCES

1. Thomson WM. Dry mouth and older people. *Aust Dent J* 2015;60 Suppl 1:54-63. <http://dx.doi.org/10.1111/adj.12284>
2. Patel PS, Ghezzi EM, Ship JA. Xerostomic complaints induced by an anti-sialogogue in healthy young vs. older adults. *Spec Care Dentist* 2001;21:176-81. <http://dx.doi.org/10.1111/j.1754-4505.2001.tb00251.x>
3. Hunter KD, Wilson WS. The effects of antidepressant drugs on salivary flow and content of sodium and potassium ions in human parotid saliva. *Arch Oral Biol* 1995;40:983-9. [http://dx.doi.org/10.1016/0003-9969\(95\)00079-5](http://dx.doi.org/10.1016/0003-9969(95)00079-5)
4. McIntyre GT. Oral candidosis. *Dent Update* 2001;28:132-9.
5. Hopcraft MS, Tan C. Xerostomia: an update for clinicians. *Aust Dent J* 2010;55:238-44. <http://dx.doi.org/10.1111/j.1834-7819.2010.01229.x>
6. Oral and Dental Expert Group. Therapeutic Guidelines: oral and dental. Version 2. Melbourne: Therapeutic Guidelines Limited; 2012.