10-MINUTE CONSULTATION

Dry mouth

Mark Taubert, Eleanor M R Davies, Ian Back

Holme Tower Marie Curie Centre,
Penarth CF64 3YR

Mark Taubert specialist registrar in
palliative medicine

Ian Back consultant in palliative
medicine

Fairwater Health Centre, Cardiff
CF5 3JT

Eleanor M R Davies general
practitioner

Correspondence to: M Taubert
mtaubert@hotmail.com

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A 67 year old man presents with a six week history of dry mouth (xerostomia). He has prostate cancer, which has spread to his spine, and he takes opiates for pain relief. Recently, he started taking an antidepressant. He finds having a dry mouth frustrating as it interferes with his speech and chewing and he can no longer taste his food.

What issues you should cover

Dry mouth has many causes and is commonly encountered in patients with cancer.

History

Consider what the patient is experiencing and what he is finding most distressing. Dry mouth can affect quality of life by causing dysphagia, loss of taste, or prolonged chewing.

Establish the underlying cause(s)—for example, nasal obstruction can cause mouth breathing, with resulting dryness of lips, mouth, and throat. Assess hydration status and fluid intake. Ascertain his mental state and determine his ability to take care of himself. Anxiety can be a cause of dry mouth as a result of autonomic hyperactivity. Cancer treatment in the form of radiotherapy to the mouth, head, or neck can cause dry mouth.

What medication is the patient taking? Opiates can cause dry mouth, as can tricyclic antidepressants, antihistamines, diuretics, and newer drugs such as bupropion. Many drugs have antimuscarinic properties (see box), which can also decrease salivary output.

Sjögren's syndrome causes dry mouth and is associated with connective tissue disease. Sarcoidosis and iron overload in haemochromatosis can damage the salivary glands.

Examination

Examine the patient's mouth with a pen torch. Are there signs of oral disease, such as candidiasis or gingivitis? Assess the state of lips, gums, and teeth and note the amount of saliva. Do not forget to look underneath the tongue to check for masses blocking salivary excretion. Check the parotid glands for swelling. Check the bedside as well; is the patient on home oxygen via face mask and is the oxygen humidified?

What you should do

Treat reversible causes

- Assess and treat underlying dehydration. Ask about caffeine intake, as this can worsen dehydration
- Treat underlying infection such as candidiasis with antifungal pastilles or suspensions (nystatin) or gels (miconazole). Candidiasis is probably a consequence of dry mouth but can exacerbate the sensation by coating the tongue and adjacent structures
- If the patient is mouth breathing at night, try short term topical nasal decongestants

MEDICATIONS WITH ANTIMUSCARINIC PROPERTIES

- Bronchodilators: ipratropium and tiotropium
- Antiparkinsonian drugs, such as benztropine, orphenadrine, procyclidine
- Antipsychotics: typical (mainly groups 1 and 2) and atypical (clozapine, quetiapine)
- Mydriatic and cycloplegic eye drops: atropine sulphate, tropicamide, and cyclopentolate hydrochloride
- Drugs used in irritable bowel syndrome and diverticular disease, such as hyoscine butylbromide and dicycloverine hydrochloride
- Drugs used to treat urinary incontinence, such as oxybutynin and tolterodine tartrate
- Antihistamines, such as cyclizine and chlorphenamine
- Antiperspirants/antiseptics: glycopyrronium bromide
- Tricyclic antidepressants, such as amitriptyline hydrochloride, dosulepin hydrochloride

- Anxiety is a treatable cause and needs to be managed. Find out what is making him feel anxious and discuss fear openly. Counselling may be necessary
- Carefully go through the medication he is taking and consider replacing or stopping causative agents.

Manage symptoms

- Try local treatments. Simple measures include sucking on pineapple slices, frequent sips of cold orange squash or semifrozen fruit juice, and sugar-free chewing gum
- The idea of artificial saliva may take some getting used to, but consider suggesting sprays, lozenges, and gels to use before meals
- Patients with their own teeth can use saliva preparations containing fluoride. Gel preparations are useful for overnight use as they last longer
- Cracked lips can be very sore—treat with petroleum jelly
- Pilocarpine (for systemic saliva stimulation) is sometimes used after radiotherapy and to treat the symptoms of Sjögren's syndrome, but it can have considerable side effects
- Lemon juice should be avoided as it depletes the salivary glands of saliva
- Dry mouth is associated with dental caries, so referral to a dentist may be required.

Competing interests: None declared.

USEFUL READING

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This is part of a series of occasional articles on common problems in primary care. The BMJ welcomes contributions from general practitioners to the series.