The cracker challenge – how it feels to have a dry mouth

Can you imagine your mouth being this dry – forever? Chris Curtis, founder of The Swallows Head and Neck Cancer Charity, graphically drew our attention to this problem with patients following treatment for cancer at the BDA Conference this year. This article aims to show how to give practical help to these patients.

What is xerostomia?
Xerostomia is a more common problem than patients and health care professionals realise. Many patients do not believe they have a dry mouth so, as dental professionals, we should be looking at the whole oral environment, including saliva flow, not just teeth and gums. The mouth is the window to the body. We should be checking with the patient the amount of fluid they are drinking throughout the day and advising them to drink six to eight glasses of water per day.¹

What causes xerostomia?
Dry mouth can be caused by medications treating depression, anxiety, pain, allergies, and colds, acne, epilepsy, hypertension (diuretics), diarrhea, nausea, psychotic disorders, urinary incontinence, asthma and Parkinson’s disease.

According to Porter, Scully and Hegarty over 500+ medications cause xerostomia.² In this study, xerostomia was ranked the third most distressing symptom. How many of our patients are prescribed at least one?

Dry mouth can also be a side effect of medical conditions, including Sjögren’s syndrome, HIV/AIDS, Alzheimer’s disease, diabetes, anaemia, cystic fibrosis, rheumatoid arthritis, hypertension, Parkinson’s disease and stroke.

Certain treatments can cause dry mouth. Chemotherapy for cancer treatment and radiotherapy to the head and neck will affect the salivary glands.

How to check at what stage or how severe the dry mouth is and what to do if it becomes worse?
Many clinicians use a simple scale of ++/+++ or use descriptive words, which is useful, but not reproducible.

The Chalacombe scale was devised by Professor Stephen Challacombe from King’s College London Dental Institute and released in 2011.³ This scale has been developed using an additive score from 1-10 and then categorising the severity of the dryness and what treatment is suggested. A downloadable wall-mounted surgery poster is available.

The question is how do we manage patients with xerostomia?
Public Health England (PHE)’s Delivering Better Oral Health: an evidence-based toolkit for prevention (third edition March 2017) recommends high fluoride toothpastes. Duraphat 5000 toothpaste is for patients over 16 and Duraphat 2800 toothpaste for patients is for patients over 10 years old. These are prescription high fluoride toothpastes, which only require a pea-size amount on the toothbrush – ideally, twice per day.

Cancer patients with a lack of saliva are categorised as high risk of coronal caries and root caries because of the lack of saliva.

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For head and neck cancer patients, fluoride toothpastes can also be applied to the teeth overnight in custom-made dental trays to increase the efficacy.

For high risk patients PHE recommend a high fluoride varnish to be applied professionally to the teeth and any exposed root surfaces at six monthly intervals. There are a few choices of varnishes available but currently PHE recommend Duraphat varnish containing calcium fluoride 22,600ppm. Contraindications should be observed. This is a simple treatment which can be carried out by appropriately trained staff.

If a patient is not able to tolerate a toothbrush or toothpaste, then another option is a fluoride containing mouth rinse. PHE recommend using a fluoride mouthwash (0.05%) at a different time to brushing as rinsing straight after brushing reduces the beneficial effect of the toothpaste.

If a patient is not able to tolerate mint or sls then try Oranurse, a flavour free toothpaste. This toothpaste was developed initially for autistic patients who find mint toothpaste feels hot or gives them a burning sensation.

Other brands available are:
1. Biomin toothpaste is remineralising toothpaste developed by a London university available in fluoride and fluoride free versions and is low RDA.
2. Enamelon is a toothpaste from Premier which contains calcium phosphate, stannous fluoride and sphenanthus which is a herb to aid moisture and is also low RDA.
3. Enzylac is a mild toothpaste from Curaprox, which contains enzymes, is sls-free, sodium fluoride and is low RDA.

Other options for dry mouth products

There are many options available, and we are well placed to suggest these to patients appropriately. Always check for instructions for the use of a product to help them work as effectively as possible. Check for pH and check for contraindications or contents, which may not be suitable for vegetarians or vegans, or people from religious groups.

Check the specialist pharmacy service, a resource prepared by UK Medicines Information (UKMI) pharmacists for NHS healthcare professionals, for the current updated list of saliva substitutes available. pH7 is considered as neutral and <pH of 7 as acidic. However, many products are above the critical pH of 5.5.4

Dry mouth products

1. Bioxtra have a range of products for dry mouth: mouthwash, toothpaste, gel and spray. These contain xylitol, enzymes, are sls free and alcohol free. Some of the range contain fluoride and aloe vera. Check for pH and contraindications
2. Gelclair is a mouthwash and is available on prescription or online and can be used either in dilution or straight onto the tissues to help lubrication and protection of the mucosa by producing a protective barrier.
3. Benzydamine (Diffam) mouthwash or spray are available to purchase or on prescription and act as an analgesic, anaesthetic and anti-inflammatory. Check for contraindications.
4. Gengigel is a product in a gel and mouthwash and has no contraindications. Gengigel contains the active ingredient hyaluronan and some patients find this very soothing especially for oral ulceration.
5. OraCoat’s XyliMelts lozenges are all natural available in mint or mint free and are made from xylitol and a gum lubricant. With their oral-adhering and fully dissolving disc technology, they are able to stay in situ and promote saliva, day or night.
6. GC Dry mouth gel is a clear pH neutral gel available in five flavours. Check for contraindications.
7. Oraliev have a range of mild flavoured pH neutral products for dry mouth: mouthwash, toothpaste, gel and spray. These contain enzymes, xylitol are sls and alcohol free. Toothpaste and mouthwash contain fluoride. Check for contraindications.
8. Salivix and Salivix plus are saliva stimulant pastilles. These contain malic acid, xylitol and fluoride. Check for pH and contraindications.
9. Saliveze is available in a pH neutral sugar-free spray.
10. Xerostom has a range of lemon flavoured neutral pH products: toothpaste, gel, spray, pastilles and gum. This range of products contains salicalive which contains vitamin B5 and vitamin E.
11. Mugard is an oral muco-adhesive oral rinse available on prescription. Check for contraindications.
12. Biotene have a range of pH neutral products. Gel is available on prescription and contains xylitol and sorbitol.