

Dental care of cancer patients Before, during and after treatment

In her previous article, dental hygienist JOCELYN HARDING discussed the rationale for oral health advice for patients undergoing cancer treatment. Here, she considers the advantages of a selection of currently available products to alleviate some of the common symptoms...

ACCORDING to Cancer Research UK there were 352,197 new cases of cancer diagnosed in 2013. So the question arises, how can we, as health professionals, best look after and advise these patients before, during and after treatment? Let's take a look at the wide range of products we can offer our patients to help them manage the side-effects of treatment.

1. Fluoride

I. Public Health England (PHE) – *Delivering Better Oral Health: an evidence-based toolkit for prevention third edition 2014* recommends high fluoride toothpastes. Duraphat 5000 toothpaste, for patients over 16, Duraphat 2800 toothpaste for patients aged over ten. These are prescription high-fluoride toothpastes that 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. For head and neck cancer patients, fluoride toothpastes can be applied to the teeth overnight in custom made dental trays to increase the efficacy.

II. Cranurse supply toothpaste, which is a non-flavoured and SLS (sodium lauryl sulphate) free fluoride toothpaste. This contains sodium monofluorophosphate 1450ppm fluoride. The use of SLS-free toothpastes may reduce the incidence of oral ulcers.

III. Bioxtra toothpaste markets a toothpaste that contains sodium monofluorophosphate 1500ppm fluoride, natural enzymes and xylitol, and is also SLS-free.

2. Fluoride varnish treatment

For high-risk patients Public Health England (PHE) recommends 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 becoming available, but currently PHE recommends Duraphat varnish containing calcium fluoride 22,600ppm. Contraindications should be observed.

3. Toothbrush

A patient may or not be able to manage a toothbrush. An electric toothbrush is ideal but anything in the mouth may be too tender. To help a patient achieve good plaque control, we need to find a brush that a patient can manage in their mouth. Curaprox markets a soft headed surgical toothbrush, which is useful as the head is small and the filaments are very soft.

4. Mouth rinses

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.

5. Dry mouth products

Some patients develop a very dry mouth and require mouthwashes and gels purely for lubrication.

I. Bioxtra mouth rinse, gel and gel mouth spray contain lactoperoxidase, lysozyme and lactoferrin enzymes. The mouthwash is alcohol free without menthol or foaming agents. Bioxtra mouth gel can provide lubrication for many hours. For longevity, a small pea size of gel should be placed on the back of the hand, then rubbed between finger and thumb and applied around the oral tissues. Bioxtra mouth rinse and Bioxtra gel mouth spray contain xylitol and fluoride. Bioxtra gel and Bioxtra gel mouth spray – contraindications- milk and egg allergies.

II. Gelclair 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.

III. Benzylamine (Diffam) mouthwash or spray are available to purchase or on prescription and act as an analgesic, anaesthetic and anti-inflammatory. Contraindications: age restrictions and allergies to ethanol (mouthwash) and glycerol (mouthwash and gel)

IV. Gengigel is a natural product available to buy and comes 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.

V. OraCoat's XylMelts lozenges are all natural and are made from xylitol and a gum lubricant. With their adhering and fully-dissolving disc technology, they are able to stay in situ and promote saliva, day or night, while helping to inhibit decay.

6. Calcium Repair Mousse

GC produce two calcium repair products - tooth mousse and MI paste available in a choice of flavours. Tooth mousse is safe for babies and pregnant women and can be used with Duraphat 2800/5000 toothpaste. MI paste, safe for children six years and over, can only be used with Duraphat 2800 toothpaste. This product has the benefit of pushing calcium and phosphate ions back into the tooth surface. Apply a small pea size amount on the end of the tongue and then lick it around teeth or applied on the end of a clean finger and wipe around. Contraindications: milk.

7. Interdental cleaning

Controlling biofilm in these inaccessible areas is difficult, but should be attempted



by patients. If it is possible there are many choices of TePe interdental brushes, Wisdom Clean Between brushes and OraB Glide Floss picks. A Waterpik Ultra Water Flosser or Philips Sonicare Airfloss may be an easier option to consider. These can be used with warm water to make the cleaning more comfortable. Ideally to be used before tooth brushing to not wash away the benefits of the fluoride toothpaste.

8. Chewing gum and sweets

It has been found that saliva production can be stimulated when chewing gum so encouraging the use of sugar free gum and ideally versions that contain xylitol can help with lubricating and reducing decay. Peppersmith's produce a range of xylitol sweets and gum in a variety of flavours so helping with the change in taste and helping to reduce decay.

After treatment, the patient should be encouraged to attend regularly for examinations and ongoing care with their dentist and hygienist for preventive advice and treatment, and to give patients reassurance about their recovery process. The optimal timing of this will be decided by the specialist and will depend on the patients type of treatment and how they have responded. The specialist may recommend a prescription mouthwash, such as calphosol or mugard, to help alleviate the patient's mucositis.

For some head and neck cancer patients (HNc) the severe problem

of osteoradionecrosis (ORN) cannot be avoided. Regular dental visits for checking oral health and helping to prevent infections and caries, especially root caries, are of utmost importance for this type of patient. These patients must continue using a high fluoride toothpaste and tooth mousse/MI paste long term as a good regular daily preventative routine is paramount for these high caries risk patients.

Dentistry is an ongoing science, based on evidence and communication, so consider building up a rapport with your local oncology department and team. Perhaps you could arrange a visit to them, as they will be more than happy to help with current guidelines and answer any questions.

Good luck! ■

About the author

Jocelyn qualified as a dental hygienist at RADC Aldershot in 1992 whilst serving in the Royal Navy and worked in Gibraltar, Hong Kong and Hawaii. Jocelyn has been part of the award-winning team at Confident Dental Care and Implants Centre in Stroud for 9 years. For further information about this article please contact josh@confident-dental-care.co.uk

