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Cancer Campaign

able, should not be worn. Acrylic dentures should be soaked in a sodium hypochlorite solution, and metal dentures should be soaked in chlorhexidine. Joshi says: ‘It’s important that dentists encourage their patients to brush their teeth well and use fluoride mouthwashes and a fluoride gel at night.’

During cancer treatment

Head and neck cancers patients suffer several severe problems in their mouths because of radiation therapy. Like 40 per cent of all cancer patients, they will also experience oral complications from chemotherapy. Joshi advises, ‘By offering appropriate preventative care and advice, it may well be possible for dentists to lessen the severity of these problems.’

Oral mucositis

First, let’s take oral mucositis which is a painful inflammation of oral mucosa resulting from chemotherapeutic agents or ionising radiation. In one of the most common complications of radiotherapy in head and neck patients. The pain is sufficient to prevent oral feeding such that they need to be fed using a nasogastric tube, or a PEG (percutaneous endoscopic gastrostomy) tube, made of flexible silicone, that allows liquid foods to be put directly into the stomach.

Erythematous mucositis typically appears seven to 10 days after high-dose cancer treatment. According to the National Cancer Institute, ulcerative oral mucositis occurs in approximately 40 per cent of patients receiving chemotherapy. Although each patient suffering from mucositis is likely to present differently, in all cases it is vital that the very highest standards and level of oral care are maintained. Oral care protocols should include systematically cleansing the oral mucosa, maintaining lubrication of the lips and oral tissues and relieving pain and inflammation.

Bland rinses such as a mix of saline and sodium bicarbonate are helpful in cleansing the mouth, moisturising it. Next, mucosal coating agents, such as Gelclair that help coat the painful ulcerations should be introduced. Topical anaesthetic gels such as Benoquin and mouthwashes like Difflam are helpful in relieving discomfort. In approximately 50 per cent of these patients, lesions are severe and require medical intervention and given morphine medications for pain relief. The mucositis generally improves about 4 weeks post radiotherapy but can vary.

Dry mouth

Initially, the saliva produced becomes very stringy as the serous actin in the parotid glands stop producing saliva. Patients often find this very distressing. As it is hard to spit the viscous saliva out or even swallow it, it creates a choking feeling. The saline and sodium bicarbonate mouth rinse or a lanolin containing lip preparation may be helpful in softening their saliva. Many patients also find mucosal epithelium (mucositis) to cause a source for disseminated infection by a variety of organisms.

Candidias

Fungal infections like Candidias are a recurring problem for many mouth cancer patients. They are often caused by opportunistic overgrowth of C albicans or C. glabrata taking advantage of the myelosuppression caused by the chemotherapy, or mucosal injury and salivary compromise caused by the irradiation. While topical antifungal prophylaxis and treatment may clear superficial oropharyngeal infections, they are generally not well absorbed and are ineffective against more deep invasive fungal infections.

• Treating superficial candidias should include cleaning the oral cavity prior to administering topical antifungal medication like Nystatin lozenges. Irrigation and mechanical plaque removal may also be needed before drug dosing. If xerostomia is present, GPDs are advised to use an amphoterin B suspension instead. For persistent or locally invasive fungal infections, appropriate systemic agents like Fluconazole (Diflucan) should be prescribed but remember that up to 25 per cent of non-alkaline yeasts may be resistant to azoles.

Herpes simplex

A reactivation of herpess simplex can also occur in mouth cancer patients during their treatment. It presents as clinically atypical painful aggressive intra-oral ulceration of sudden onset and slow healing. Diagnosis requires a high index of clinical suspicion. The newer automated polymerase chain reaction (PCR) assays increase herpes simplex virus (HSV) detection rates but in practice systemic anti-viral therapy is usually commenced before results.

After cancer treatment

Unfortunately, chronic complications continue after cancer treatment has ended. Anxiety, mood disorders, fatigue and depression are often reported psychosocial complaints. There are also physical complaints like trismus, orofacial and neck pain, speech and swallowing problems, and loss of taste. Patients are also at risk from tooth decay. While the oral hygiene protocol mentioned earlier will help reduce the chances of tooth decay, radiation caries does occur owing to the lack of saliva and its protective buffering and remineralising properties. I would urge dentists to manage radiation caries by restoration of early lesions and protection afforded enamel and dentine with every simple measure like ‘temporary’ composite or polyacrylic crowns as doing nothing will result in loss of the teeth,’ says Joshi. Osteoradionecrosis is a risk if tooth decay leads to extractions in irradiated jaw bone.

Coping with pain

One of the most debilitating side effects, of course, is pain. It has been reported that certain classes of chemotherapeutic, in particular, can cause orofacial pain. ‘Often this pain is attributed by the patient, surgeon and oncologist as a side-effect of the surgery or radiotherapy the patient had,’ observes Joshi. ‘Many cancer patients often suffer from stress and sleep dysfunction and these patients may well experience temporomandibular dysfunction pain involving muscles of mastication as the condition correlates with stress and dysfunctions habits such as bruxism and jaw clenching,’ he continues. The dentist can help reduce the patient’s discomfort. ‘Initially, discomfort diagnosis and sensible use of muscle relaxants or anxiety-reducing agents, plus physical therapy. These may include moist heat applications, massage and gentle stretching exercises. For those patients with a propensity for clenching or bruxism during sleep, customised occlusal splints may provide some relief.’

Often, the treatment is disfiguring and affects their body image and self-esteem. Following neck dissections, patients also complain of stiffness of the neck and grade donor site scars. ‘My patients have found Bio-Oil very helpful in softening their scars,’ says Joshi. ‘Bio-Oil is a specialist skincare product that helps improve the appearance of scars, stretch marks and uneven skin tone.’

He concludes, ‘Head and neck cancer patients require support and care. Dentists have an important role to play in caring for them.’

**About the author**

Dr Vinod Joshi is the Founder and Chief Executive of the Mouth Cancer Foundation which supports patients and carers in dealing with the problems of living with cancer by providing information about the condition and care, sharing patient experiences through its website which provides a 24/7 online support group. He believes it is vital that hospitals and GPDs work in partnership to provide the very best standards and level of oral care for head and neck cancer patients.

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