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, brushes, and a fluoride gel at night.’

During cancer treatment

Head and neck cancer 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 preventive 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. It is 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’s vital that the very highest standards and level of oral care are maintained. Oral care protocols should include atraumatically 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 Bonjela and mouthwashes produced. Topical anaesthetic gels 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 this can vary.

Dry mouth

Initially, the saliva produced becomes very stringy as the serious actin in the parotid gland stops 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 salivary and mucosal coating agents, such as like Biotene Oral Balance gel or a lanolin containing lip preparation, are helpful in cleansing the oral cavity prior to administering radiation. It is one of the most distressing complications from chemotherapy. Joshi advises, ‘By offering appropriate preventive care and advice, it may well be possible for dentists to lessen the severity of these problems.’

Fig. 6: Radiograph shows caries developing after radiotherapy.

For many mouth cancer patients, they are often caused by opportunistic overgrowth of C albicans or C. glabrata taking advantage of the mycophagousness 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 deeply invasive fungal infections.

Treating superficial candidiasis should include cleaning the oral cavity prior to administering topical anti-fungal medication like Nystatin lozenges. Irrigation and mechanical plaque removal may also be needed before drug dosing. If xerostomia is present, GDPs are advised to use an amphoterically B suspension instead. For persistent or locally invasive fungal infections, appropriate systemic agents like Itraconazole (Itraflucan) should be prescribed but remote patients with N-alcanoylamides may be resistant to azoles.

Fig. 4 & 5: Caries that can occur in dry mouths where the quality and quantity of saliva has been affected. The prevention of this is what dentists can do in practice.

Coping with pain

After high-dose cancer treatment is yet another complication GDPs will have to deal with. Many patients also find Mucolyn (you can ask the GP to prescribe) of assistance in reducing pain. The newer automated polyme-rose chain reaction (PCR) assays increase herpex 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 also frequently 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 carries does occur owing to the lack of saliva and its protective buffering and remineralising properties. ‘I would urge dentists to manage radiation carries by restoration of early lesions and protect affected enamel and dentine with even simple measures like ‘temporary’ composite or polycar- bonate 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.

He concludes, ‘Head and neck cancer patients require require supportive 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 cancer, its treatment, and comorbidities, shared patient experiences through its website which provides a 24/7 online support group. He believes it is vital that hospitals and GDPs work in partnership to provide the very best standards and level of oral care for head and neck cancer patients.