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 mouth rinses, 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 PEJ (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 level of care is maintained. Oral care protocols should include using a chlorhexidine mouthwash, maintaining hydration of the lips and oral tissues and relieving pain and inflammation.

Bandages such as a mix of saline and sodium bicarbonate are helpful in cleansing the mouth, moistening it. Next, mucosal coating agents, such as Geclarl that help coat the painful ulcerations should be introduced. Topical anaesthetic gels such as Bonjela and mouthwashes like Diffamal 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 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 siltates like Salvart are also helpful. ‘Ask them to avoid alcohol-based mouth rinses, tea, coffee, cola and other caffeinated drinks as they have a tendency to dry the mouth,’ says Joshi.

**Oral infections**

The risk of infection in patients being treated for oral cancer can be high. The extensive ulceration of mucosal epithelium (mucositis) can represent 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 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 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, GDPs are advised to use an amphoteric B suspension instead. For persistent or locally invasive fungal infections, appropriate systemic agents like Fluconazole (Dis-flucan) should be prescribed but remember that up to 25 per cent of non-albicans yeasts may be resistant to azoles.

**Hepares simplex**

A reactivation of herpes 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 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 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 of exposed bone and soft tissue with mouth rinses and sealants as appropriate. DSTUK0208_10-11_Cancer 18.01.2008 11:43 Uhr Seite 2 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 mouth cancers, treatments, complications, 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 best standards and level of oral care for head and neck cancer patients.

**About the author**

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