Our campaign to keep patients SAFE

Learn more about DTUK’s Mouth cancer campaign and help save lives. This month, we look at the dentist’s role in cancer treatment.

The referral

As a dentist, you play a pivotal role in increasing awareness of mouth cancers and identifying and appropriately referring early stage mouth cancers. Referrals can be stressful—for the patient, for you and for your nurse—so it will help to have a procedure worked out in advance. Patients may already have suspicions about the possibility of an abnormality in their mouth being a cancer or ‘nasty’.

The skill in patient counseling lies in allowing the patient to express his or her fears and concerns in a controlled way, by asking them what they think it may be. Where you have genuine concerns about a lesion being malignant or potentially malignant, this information should be communicated to the patient but until a formal histological diagnosis is available, no absolute information should be given to the patient. You can prepare a patient for possibly ‘bad news’ by using phrases such as: ‘I have some concerns about what I can see in your mouth. However, I am not completely sure what is going on and I would like you to see a specialist,’ ‘I don’t think we can jump to any conclusions at this stage, because many different conditions occur within the mouth. That’s why seeing a specialist is so important.’

Nurturing your patients

Do encourage your patient to return to the dental practice for further discussion and support if they feel the need. The patient should not feel that they are being sent away ‘into the unknown’ without any support mechanisms in place. It is important not to burden your worried patient with guilt about using tobacco and/or alcohol but focus on getting as early a diagnosis as possible.

You should be aware of what happens when a patient has been referred and be able to give your patient an idea of what to expect. If you are seriously concerned that cancer may be present, then telephone or fax the consultant. Most will then ‘fast track’ your patient to an earlier consultation. Ideally, arrange a specialist appointment by phone, before the patient goes home. If that is not possible, tell the patient that you will contact the specialist as quickly as possible afterwards and report back, again by phone. A patient will worry about any sort of specialist referral and you want to keep uncertainties and delays to a minimum.

Before cancer treatment

Many of these patients will be treated with surgery, radiotherapy, chemotherapy or a combination of these treatments and oral complications are varied and common. The oral status of cancer patients is no different from that found in the rest of the general population. They will have average dentitions in various states of repair with filled teeth, bridges, crowns some root-filled teeth, varying degrees of periodontal disease, ill-fitting denture prostheses and general hygiene neglect.

By treating oral problems before anticancer therapy begins, the dentist can play a key role in helping to prevent or reduce the severity of oral complications later on. Pain and discomfort resulting from teeth and gums may make it difficult for a patient to receive all of his or her cancer treatment such that sometimes, treatment is stopped completely.

Dentists should ensure that any pulpitis/periapical lesions are eliminated before the start of chemotherapy as these infections can complicate treatment. Identifying and treating teeth at risk of infection or decay will help patients avoid the need to have invasive dental treatment during their anticancer therapy. It is important for patients to be informed about the possibility of removable prostheses such as dentures can also pose a risk of microbial invasion into deeper tissues.

The dental practitioner can play a vital role in preparing their patients before their treatment so that complications are minimised,’ says Dr Joshi. ‘The goal should be to complete all dental care before and dental extractions at least two weeks before radiotherapy to allow healing,’ he adds.

After the therapy

Many patients will suffer from a dry mouth from a lack of saliva with difficulties in swallowing, even after successful therapy. The lack of saliva puts the teeth at grave risk of tooth decay, which can occur alarmingly rapidly. Mouth care protocols that emphasise oral hygiene are essential. Patients should also be counselled to brush and floss regularly and to use fluoride daily. The teeth should be cleansed four times daily using a soft bristled toothbrush and mildly flavored fluoride toothpaste.

After brushing, a sodium fluoride rinse like Flouridgel should be held in the mouth for at least one minute before expectorating. No food or beverage should be consumed for at least 50 minutes after fluoride application. At night after rinsing, a stannous fluoride gel like Gel-Kam can be applied to the teeth with a toothbrush, or a custom applicator tray, and left in place for five minutes before expectorating. The gel contains glycerine and patients find that it helps with reducing the discomfort of a dry mouth during the night, too. Chlorhexidine mouth rinses like Corsodyl (diluted) or Chlorhex 1200 used twice daily are also useful in preventing caries by reducing lactobacillus counts in the mouth.

However, as they are ineffective when used with the fluoride mouthwashes, they should be used in between brushing times. Dentures, if uncomfortable...
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 Pez (percutaneous endoscopic gastrostomy) tube, made of flexible silicone, that allows liquid feeds to be put directly into the stomach.

Erythematous mucositis typically appears seven to 10 days after high-dose cancer treatments. 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 the use of soft-bristled toothbrushes, maintenance 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 Celeplast that help coat the painful ulcerations should be introduced. Topical anaesthetic gels such as Bonjela and mouthwashes like Diffam are helpful in relieving discomfort. In approximately 50 per cent of these patients, lesions are severe and require medical intervention and given morphone 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 acini 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 saliva and stites like Saltavart are also helpful. Ask them to avoid alcohol-based mouth rinses, tea, coffee, colas 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 dissemination of infections 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 mycosis or mucosal injury and salivary compromise caused by the irradiation. While topical antifungal prophylaxis (AFOs) 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 protect affected enamel and dentine with even simple measures like temporary composite or poly carbionate 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 chemotherapy, in particular, can cause oral mucosal 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 dysfuncti situation of biological habits such as alcoholism, and jaw clenching,' he continues. The dentist can help reduce the patient's discomfort through the treatment of 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.

Fungi like Can-

sist on of assistance in reducing the severity of these problems.'

Oral care protocols should include cleaning the patient, surgeon and carers require support.

Joshi believes it is vital that hospitals and GPs work in partnership to provide the very best standards and level of oral care for head and neck cancer patients.