Oral cancer
Unless the practitioner is ever vigilant, there is a risk that the early diagnosis of a malignant lesion might be missed.

In most developed countries, oral malignancy is a rare finding in primary dental care practice; indeed, the presence of malignancy is reported to be as low as 1-1.5 cases per 100,000/year and on this basis it is very unlikely that most dentists will see more than 1 or 2 cases in a lifetime. Given the large number of patients seen by dentists every year, it is clear that a vigilant approach should be adopted for every patient if malignancies are not to be overlooked.

The phrase ‘common things occur commonly’ is very relevant, which means that the most likely explanation for something will usually be the correct one. Occasionally, however, oral and facial lumps, bumps, swellings, discharges and ulcerations do not respond to the usual or accepted lines of treatment and concern should then be raised as to whether the problem really is a ‘common’ one or whether it could be rare, or even sinister. Strange infections relating to retained roots, local osteomyelitis, swellings, discharges or infected cysts are some of the problems, which might cause concern. Apparently benign conditions can sometimes be precursors of future problems and they require careful monitoring and follow-up. Perhaps the greatest concern is the presence of malignant lesions. Carcinomas may present as an ulcer and sarcomas can mimic a number of more common conditions including periapical lesions, periodontal disease, natural movement or tilting/displacement of teeth or facial asymmetry.

Screening

Dentists are fortunate that so many patients routinely present themselves for examination. Whatever the evidence for and against a regular check-up examinations, these visits present an ideal opportunity for screening the oral mucosa.

Adherence to the basic principles of a dental examination will enable the dentist to become alerted to the possibility of a benign or malignant lesion requiring investigation, and will certainly assist in the inclusion of such a problem in differential diagnosis. For example, an awareness of any particular ethnic propensity for malignancies of various kinds, and the relevance of factors such as age, sex etc. is important for all clinicians. Careful history taking can often reveal a recognised risk factor for oral cancer which may or may not be relevant to lesions seen in the mouth. For this reason, any such screening should include a lifestyle enquiry (use of tobacco, alcohol, betel nut etc.) and a regular review of the patient’s medical history. Smokers should be encouraged to seek professional help with smoking cessation.

The most effective oral screening is one that follows a consistent, structured and reproducible format, for each and every adult patient. Ideally this should involve a visual inspection of all areas of the mouth, including the floor of mouth, gingivae, sulci, palate, tongue and oropharynx. The first requirement is good illumination. Any unusual lesions should be palpated and examined by touch. A note should be made
of the site, size, colour and consistency of any lesion, perhaps with the help of diagrams in the clinical notes, but ideally in the form of photographs or intra-oral camera images, against which any future comparisons can more easily be made.

**Assumptions**

Ulceration in the mouth can often be caused by trauma, and dentists will be familiar with aphthous ulceration, denture trauma, cheek biting etc. Occasionally, dentists themselves cause ulceration through the overzealous use of prophylaxis brushes or cups, or the accidental trauma which results from a rotary instrument which abrades soft tissue. Just occasionally, if a malignancy is present, brushing against the site can cause trauma and alert a patient to the first awareness of pain. Such patients have been known to associate their malignant lesion with the trauma the dentist produced. Whilst there is no scientific logic for the association, it is difficult to convince the patient that the dentist’s treatment did not initiate the carcinoma.

An extra-oral examination should also be performed, routinely checking the salivary glands, lymph nodes, temporomandibular joints and bones of the lower face. A careful view of the rest of the face can reveal a variety of skin lesions, such as melanoma, basal cell and squamous cell carcinoma. In particular, concerns about facial asymmetry, persistent swelling or bleeding, or continuous low-grade pain should cause concern. Unusual masses in the salivary glands and nodes can be detected, and an early referral made. It is entirely appropriate for a dentist to make a referral to the appropriate specialist for further investigation.

It is important to assess and document nerve function when dealing with any patient who complains of unusual or persistent facial pain. Areas of motor or sensory loss, particularly when associated with pain should be investigated by a maxillofacial surgeon or a neurologist without delay. Dental practitioners should be mindful that they may be the only healthcare professional, who has the opportunity to see the patient and identify these conditions in time to make a difference to the prognosis, and quickly report changes or concerns. If they do, it is imperative that these reports are taken seriously and acted upon.

**Patient involvement**

Many straightforward oral conditions like white patches and ulcers have been linked with malignant change. It is crucial to establish the diagnosis yourself or with the help of an expert opinion, and then to monitor these conditions carefully. Part of that monitoring is explaining to the patient what is normal and what changes to look out for. Monitoring is most successful when patients are actively involved and feel that they can easily appreciate the need to act upon the referral.

A referral letter should be a proper summary of the case, including a provisional diagnosis or, at least, a clear statement of your concerns about the patient. It should include all the necessary data that the specialist will require in order to determine the urgency of the referral and contacts for the patient. It should include a statement about the patient’s relevant medical history and relevant risk factors.

Clinicians working in remote areas might email a digital clinical photograph to an appropriate specialist some distance away. This is often helpful to demonstrate...
the area of concern and the appearance of the lesion, thereby allowing the specialist to prioritise the referral appropriately. Curiously, dentists have yet to full avail themselves of the benefits of IT/telemedicine possibilities such as this. It is important for practitioners to be aware of the local protocols for referring patients with suspected malignant lesions thereby avoiding unnecessary delays in the referral.

Follow up

Establish a system that can follow up and monitoring every referral relating to oral lesions and suspected pathology. If the lesion is serious enough to merit a second opinion, it is serious enough to follow up. To suggest a referral and then to take no further interest in the outcome, has in the past been criticised as a breach of the dentist’s duty of care.

Record keeping

The purpose of record keeping is to be able to demonstrate over a period of time, whether it is long or short, that the clinician has logically written down, the findings of one or more clinical events, in sufficient detail that the event can be recalled with accuracy, without relying upon memory alone. These records should include both positive and negative findings, possibly with the aid of diagrams, photographs or charts.

In the situation where a patient alleges negligence concerning an undiagnosed malignancy or a significant delay in referral, the content of the records becomes particularly important. If the records contain no reference to the mucosa having been examined, it is difficult to disprove the allegation that the patient ‘first reported an ulcer to the dentist over six months ago’. Equally, if the records can show that an ulcer was found, described clearly, and the patient was advised to return for review ten days later, the defence against such an accusation is greatly improved. If they also record that the patient failed to attend the review and despite reminders they ignored documented attempts to arrange a review appointment, any allegation of negligence can more easily be refuted.

The persistent problem

Any persistent symptoms and/or signs, which have not responded to conventional treatment, should raise a degree of concern. Such difficulties may be highlighted in the patient who constantly takes analgesics, the apical radiolucency which does not respond to root canal treatment and an ulcer or extraction socket which does not heal within a couple of weeks. Dentists may inadvertently mask these situations by using antibiotics to treat the strange non-specific clinical conditions before them. If an apparent infection has not responded properly to a single course of antibiotics, then further consideration should at least be given as to whether a broader differential diagnosis would be more appropriate. A negative response to simple treatment is often an indicator of more sinister problems. A traumatic ulcer which is still present 2 - 3 weeks after the denture has been eased or removed, or after a rough tooth has been smoothed requires further investigation. A swelling that is still discharging or a radiolucent area, which does not improve or a radiolucent area, which does not improve following conventional root canal therapy (with or without antibiotics), might be something other than a simple infection.

In a patient who has co-operated with treatment and attended regularly, a ‘two week response’ to treatment (or the lack of such response) can be an indicator of the need to refer for a consultant opinion. Early referral can often assist in the screening of a patient for malignancy but when referral is contemplated it must be done quickly.

Close contact with the local hospital department should be fostered in order that acute cases can be seen in days rather than weeks, whenever possible. If a referral is felt to be in the patient’s interest then the patient should be followed up to ensure that the visit has taken place. Indeed, if there is any lengthening of a treatment process because of poor patient co-operation or a failure to attend, where a response to simple treatment is as negative as suggested above, then the patient should be informed of the urgent need to attend for an appointment with the consultant. Copies of referral letters any replies, and correspondence with patients regarding referral, should be safely retained.

A variety of tests and investigations are now available for primary care practitioners to use to investigate suspicious intra-oral lesions. The use of these products requires a short formal training and a clear understanding of the limitations. The danger of a false negative creating a false sense of security could lead to inappropriate
reassurance and an inevitable delay in referral. In both a negligence and Dental Council case, fault cannot be attributed to any particular product since clinicians must still rely on their own observations, suspicions and judgement.

This highlights the need to balance the natural desire to properly investigate a clinical condition, with the difficulty that might arise if the patient becomes concerned, distressed or frightened that he/she may have a malignant lesion. Patients should be handled sensitively and carefully, and a proper explanation given of the concerns and the need for referral. A false alarm will always be preferable to a missed diagnosis, and although ‘hoping for the best’ is less confrontational, it may not properly discharge one’s duty of care to the patient.

Co-operation

Cases have been reported where, because of the ongoing acute symptoms associated with a malignant lesion, patients have returned regularly to a practice but have seen different dentists on each occasion. In some cases, the urgent/emergency opinion is given by a general medical practitioner and it is possible for patients to see a combination of dentists, doctors and hospital consultants, complaining of persistent symptoms which are not being resolved by the succession of attendances - perhaps because no-one has the complete ‘picture’. It follows that at each emergency, ‘casual’, or urgent attendance, a careful history should be taken and documented to determine a patient’s precise history, both in relation to the current complaints and in relation to any symptoms which might be associated or related, and which might be receiving treatment elsewhere.

With the patient’s permission, progress can sometimes be expedited if the examining dentist consults others who have been involved in the patient’s treatment. If the patient would have benefited from a specialist referral, then all those doctors and dentists who examined the patient recently, could be involved in an investigation.

Delays

It is worth remembering that a late referral for a suspected malignant lesion may cause the patient unnecessary distress, pain and suffering through the delay in obtaining treatment. There are many cases when some delay in referral is inevitable because of the need to eliminate the more common problems, but any delay must be justified within the records, showing a proper consideration through the histories, investigations and appropriateness of treatment plans and monitoring decisions. In order to ensure that any lumps, bumps, patches, swellings, discharges or ulceration that might turn into something unusual are properly assessed, it is important that dentists stay abreast of current developments in the diagnosis of these types of lesions.

Summary

The management of oral malignancy depends on the specific diagnosis and the stage of the tumour. It is therefore crucial to refer any suspicious lesions to an experienced specialist at the earliest opportunity. A delay in referral can have devastating consequences for the patient, leading to allegations of negligence. Effective patient management in these cases is a balance between best clinical practice, informed by regular continuing professional development and underpinned by accurate and appropriate record keeping.
Kaposi’s sarcoma is an AIDS defining lesion associated with HIV, although the lesion is rarely seen in patients taking anti-retroviral drugs.