Interview: ‘The patient should be told the truth’

Dental Tribune Online spoke with Prof Stephen Porter from the UCL Eastman Dental Institute about new risk factors and prevention strategies for oral cancer.

Undoubtedly, it will increase. When a celebrity announces that he or she has a particular disorder, there is often an upsurge of referrals by concerned individuals. In the UK, this was perhaps best illustrated when Freddie Mercury declared that he had HIV. There was a substantial rise in the number of persons seeking advice and/or testing for the disease in the aftermath.

A fair number of famous people have had oral cancer, including Sigmund Freud, Ulysses S. Grant and TV producer Aaron Spelling to name but a few. In the UK, journalist and first husband of TV cook Nigella Lawson John Diamond wrote a series of articles detailing the progress of his disease and its treatment that informed many of the impact this disease can have on an individual and his or her family.

Unfortunately, the Michael Douglas situation has perhaps confused the exact role of the human papillomavirus (HPV) in mouth cancer. Certainly, it can cause mouth cancer and it can be acquired through orogenital contact, but there is no evidence that such contact will lessen any subsequent risk of contracting mouth cancer.

Oral cancer figures are rising worldwide. What are the reasons for this, and does it fulfill the criteria for an epidemic, as it has been called in some media reports?

An epidemic is defined as new cases of a disease in a given human population over a particular period. It often has an emotive element to it. Oral cancer certainly is on the increase in the developed world, although the number of new cases is falling in some parts of the globe, notably parts of India.

The rise in some countries is gradual but sustained. Smoking tobacco and/or drinking alcohol are the two factors that traditionally have given rise to mouth cancer. In addition, individuals are now acquiring cancer-causing (oncogenic) types of HPV, probably via orogenital contact. This burst of infectious disease, or indeed sexually transmitted infection, is not a new phenomenon, but it has become much more manifest in the last 50 years. So, what is new is probably that oncogenic types of HPV are just more common in the sexually active population than in the past.

The exact risk that it carries is unclear but it has been suggested that the risk of HPV-related mouth and/or throat cancer climbs when someone has had more than nine different sexual partners.

What other factors besides smoking, drinking and HPV are currently being investigated, and what is their malignant potential?

People chew betel nut preparations (eg paan masal and gutka) in parts of India, Pakistan, Bangladesh and surrounding areas. These cause initial fibrosis of the oral tissue, termed ‘submucous fibrosis’, which carries a high risk of causing oral cancer of possibly 50 per cent. Submucous fibrosis can arise even in young individuals and is irreversible, and thus patients are likely to have a lifelong risk of mouth cancer, even if they stop the causative habit. The nightmare scenario is that when examining a patient with submucous fibrosis the mouth opening can be so small that a clinician may be unable to see the cancer.

Mouth cancer can also arise in patients who have rare genetic disorders, such as Fanconi anaemia and dyskeratosis congenita, but the most common oral disorder that is considered to be potentially malignant is oral lichen planus. This is a global disorder that typically occurs in middle-aged and older women. It is a chronic immune disorder that may cause painless white patches that sometimes are accompanied by painful erosions or ulcers. It affects about one to two per cent of the population and is the most common disorder to affect the lining of the mouth (the oral mucosa).

It has been suggested that one-two per cent of patients with oral lichen planus will develop mouth cancer, but this risk is highly unpredictable because it does not appear to be consistently associated with the duration or type of treatment of the lichen planus, nor the age or sex of the patients, nor their alcohol or tobacco habits. The good news, perhaps, is that 98 to 99 per cent of patients with oral lichen planus will not contract mouth cancer.

Isolated white or red patches on the oral mucosa (sometimes termed ‘leukoplakia’ and ‘erythroplakia’) have malignant potential as well, but these are actually uncommon, particularly the latter, compared with oral lichen planus.

Besides new treatment concepts, prevention remains the most effective strategy against oral cancer. Why do so many dentists still appear to overlook obvious signs of the disease, and do current screening procedures have shortcomings?

The great majority of patients ultimately found to have mouth cancer will have been referred to a specialist service because a dentist or other dental professional will have noticed something abnormal. He or she might not have known what it was, but they did the correct thing by referring the patient to a specialist.

Screening for possible mouth cancer is straightforward. It is just a matter of examining the neck and mouth carefully. However sometimes dentists do not know what to look for, as they have probably never seen more than one type of oral cancer in their professional lives.

Similarly, mouth cancer is...
more likely in socio-economically deprived groups than the wealthy. Socially disadvantaged people have a tendency not to attend health care providers, including dentists, on a regular basis nor to take up possible screening opportunities for common diseases and therefore have a variable awareness and practice of disease prevention strategies, whether concerning oral health or general health.

Clearly, the best option for screening would be opportunistic screening, where health care staff examine patients in risk groups for a particular disease, but this requires people to want to attend a clinic and to appreciate the possible benefits of such attendance for their health and well-being.

Is there any evidence that regular screenings could help prevent oral cancer?

There is no evidence that a particular frequency of dental examination will lessen the risk of mouth cancer. However, the more regularly a person is examined, the greater the chance that emerging malignant or potentially malignant disease will be detected and that any lesion present will be small.

However, overzealous review is likely to be wasteful and thus all patients should be advised that if they become aware of a change in their gingivae or oral mucosa that persists for more than three weeks and has no obvious local cause, or example a sharp tooth or filling, they should seek advice from their dentist.

In its 2008 policy statement, the FDI stresses the important role of dental professionals in the detection of oral cancer and patient education. To what extent are dental professionals fulfilling this role?

The majority of patients ultimately found to have oral cancer will have been identified by a dentist or other dental professional; thus, dental professionals are fulfilling this role to a great extent. However, dental professionals should also be able to provide advice about oral cancer prevention, for example tobacco and alcohol cessation, and information on where additional advice can be obtained, for example tobacco cessation services.

The current rule of thumb is that the more people smoke and the longer that habit the greater the risk of mouth cancer. The same applies to alcohol. There are some nuances as regards the type of tobacco or alcohol that may affect risk but these are really not of notable concern when communicating a disease prevention message. Of significance is that the risk of cancer developing if someone smokes and drinks is much higher than if someone smokes or drinks (i.e. there is a synergistic rather than additive effect).

Of course, many dentists will indicate that they have no experience of having seen oral cancer or having managed any patient who has previously had such disease. However, there are some simple rules. If a lesion is solitary, has been present for more than three weeks and has no local cause, the patient should be referred. Any lesion that strikes a dental professional as odd and/or destructive warrants referral.

Dentists should always keep an accurate and contemporaneous record of what is observed during clinical examination and be familiar with the contact details of local oral cancer specialists (typically oral and maxillofacial surgery or oral medicine).

Finally, the patient should be told the truth, i.e. that the dental professional has concerns that a lesion is possibly malignant or premalignant, and is thus referring the patient for further investigation.