Detecting and managing potentially malignant diseases of the mouth presents challenges to dental professionals worldwide. At the 2015 AWDC in Istanbul, DTI took the opportunity to speak with FDI president Prof. Stephen Porter from the UCL Eastman Dental Institute in London about new risk factors, prevention strategies, and why actor Michael Douglas is not a good poster boy for changing awareness of throat and mouth cancer.

DTI: A recent study on Turkish dental patients in central Anatolia has shown that only once in two people are aware of oral cancer. Are these results representative of most people’s knowledge about the condition nowadays?

Prof. Stephen Porter: It is not uncommon for individuals not to be aware that cancer can arise in the mouth. Indeed, there are anecdotal reports of even patients without cancer who attend clinics that specialize in mouth cancer unaware of the possibility. This trend regarding a lack of awareness occurs across the globe, although it varies between countries.

With celebrities like actor Michael Douglas struggling publicly with the disease, do you think awareness of malignant diseases of the mouth is increasing?

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 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 the media play a role in epidemiology?

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 the fact that some types of HPV are just as 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 oral/hypopharyngeal cancer climbs when someone has had more than nine different sexual partners.

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

People chew betel nut preparation regularly (i.e. in South Asia and the Far East, in Malaysia and gauta) 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 99 cent. Submucous fibrosis can arise even in young individuals and is irreversible, and thus patients are likely to have a long life-risk of mouth cancer, even if they stop the causative habit.

The nightmare 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 anemia and dyskeratosis congenital, but the most common oral disorder that is considered to be potentially malignant is oral lichen planus. This is a chronic inflammatory disorder that may cause painful white patches that sometimes are associated with painful erosions or ulcers. It affects about 1 to 2 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 1 to 2 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 (some-time termed “leukoplakia”) and “erythroplakia”) are some of the diagnoses that are currently discussed. What is the malignant potential of these lesions?

Dental professionals should always keep in mind that simply referring the patient to specialists such as oral surgeons or oral medicine practitioners are fulfilling this role to a certain extent 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 can help prevent oral cancer?

There is no evidence that a particular frequency of dental examination will lessen the risk of mouth cancer. However, overzealous repeated screening may be tedious and thus all patients should be advised to be aware of a change in their gingivae or oral mucosa that persists for more than a week, or any 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. In the developed world, for example dental 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 drink, 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 not really 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 they only smoke or only drink (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, it 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 medical oncology).

Finally, the patient should be told the truth, i.e. that the dental professional has reason to believe a lesion is possibly malignant or premalignant, and is thus to be referred to a specialist for further investigation.

Thank you very much for the interview.