Detected and managing potentially malignant diseases of the mouth: Challenges to professional dentists worldwide. At the 2015 AWDC in Istanbul, DTI had the opportunity to speak with FDI presenter 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 one 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 individuals without even patients without cancer who attend clinics that specialise 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 cancers, including DJingn Freund, Ulysses S. Grant and TV presenter 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 case may perhaps have 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 relate to lifestyle factors 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 diseases, 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 how the 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 cent. Submucous fibrosis can arise even in young individuals and is irreversible, and thus patients are likely to have a life-long risk of mouth cancer, even if they stop the causative habit. This 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 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. Lichen planus is a common immune disorder that may cause painful white patches that sometimes appear as red or white 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).

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.

**Is there any evidence that a particular frequency of dental examination will lessen the risk of mouth cancer?**

It is well-established that smoking, drinking and HPV are causative factors for oral cancer. Tobacco and alcohol are associated with the greatest risk of mouth cancer. 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 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 tobacco or alcohol cessation is not achieved (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 oral medicine).

**How can dental professionals help prevent oral cancer?**

Dental professionals should also be aware that cancer can be prevented through orogenital contact as well, but these are usually uncommon, particularly if the later is compared with oral lichen plans.

Isolated white or red patches on the oral mucosa (sometimes termed “leukoplakia”) and “cramulitis” are less common, potentially malignant as well as being usually uncommon, particular if the later is compared with oral lichen plans.

**Is there any evidence that particular frequency of dental examination will lessen the risk of mouth cancer?**

There is no evidence that a particular frequency of dental examination will lessen the risk of mouth cancer. However, overzealous reviewing of the mouth will be a waste of time as thus all patients should be advised to be aware of any changes in their gingivae or oral mucosa that persists for more than three weeks or no obvious local cause, or, except a sharp tooth 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. Dental professionals are fulfilling this role to a great extent. However, dental professionals are not 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.

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**Is there any evidence that particular frequency of dental examination will lessen the risk of mouth 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.