

Key points

- Oral cancer is a common disease with a largely preventable aetiology and upsettingly high mortality
- There are many different ways in which oral cancer may present, so knowing the various common presentations is important
- Effective screening and efficient referral are pivotal in early diagnosis and increased outcomes for the patient
- Raising awareness in our patients of oral cancer, its signs and symptoms and the importance of regular dental check-ups for screening

Introduction

Since the emergence of COVID-19 the world has felt the full impact of this pandemic. Due to the high infectivity of the virus strict rules were implemented to mitigate transmission, resulting in people having to stay at home in the United Kingdom's first national lockdown. In response to the pandemic, the cessation of all routine dental care was enforced in March 2020, with many dental practices only providing remote triaging and over the phone advice. June 2020 saw the re-opening of dental practices for face-to-face care, however this 76 day dental hiatus had a severe impact on the service and its patients, with the British Dental Association estimating 19 million missed appointments.1 With new standard operating procedures in place, fewer services were provided with many practices working at only 20% capacity, resulting in patients having to wait for longer than usual to be seen.2

The number of missed dental appointments and the reduction of face-to-face doctor appointments with General Practitioners could mean that far fewer oral cancers are diagnosed in their early stages. Improved outcomes for patients with oral cancer rely on early detection, therefore a reduction in screening and a 65% fall in oral cancer referrals over the lockdown period could possibly lead to a harmful rise in mortality.

Susceptibility to oral cancer is largely influenced by a patient's lifestyle, with 46-88% of oral cancer cases being preventable. However despite this, a 58% increase was seen in the last decade. Oral cancer now represents the 9th most common cancer for men, with two out of three patients being male. It also has a disconcerting 10-year survival rate of 18-57% depending on the site of the cancer and how early it is diagnosed. Therefore, as dental professionals it is essential that we are aware of the signs and symptoms of oral cancer, and that we know how to effectively screen, raise awareness and refer appropriately.

Risk factors

Oral cancer is a largely preventable disease. Whilst numerous risk factors have been identified, two major risk factors are present in 90% of cases: smoking and alcohol.⁵ Ascertaining each individual's risk of oral cancer based on their risk factors should be the first step in a patient's oral cancer risk assessment and, alongside other factors (caries, periodontal and tooth wear risk), should help formulate an appropriate recall interval.

Risk factors linked to oral cancer:

- Tobacco: the greatest risk factor for oral cancer and is directly attributable for two-in-three cases. ^{6,7} This includes smokeless tobacco such as gutka, supari and betel quid.⁸
- Alcohol: responsible for around one third of mouth cancers.9
- HPV: linked to 73-75% of oropharyngeal cancers.^{2,5}
- Age and gender: over time our cells encounter more DNA damage, possibly due to biological effects or increased exposure to risk factors.²
- Sunlight: increased exposure to ultraviolet radiation can result in cellular DNA damage leading to cancer. The lips would be the area most likely affected by this.
- Diet: a diet low in fresh fruit and vegetables.¹⁰

Screening

Of all cases of oral cancer, the majority occur in the tongue and 90% are squamous cell carcinomas.¹ The most common sites are the lateral borders of the tongue, tonsils, floor of the mouth and the lower lip.^{5,10}

A thorough screening for oral cancer should form part of every routine dental examination. ¹¹ Visible oral changes, termed oral potentially malignant disorders, often precede oral cancer. Therefore, it is critical that thorough visual and tactile examination of the oral mucosa is carried out along with a risk assessment enquiring into the patient's tobacco and alcohol use.

A systematic approach is fundamental when carrying out oral cancer screenings to ensure that all appropriate areas have been correctly checked. Each person will develop their own routine for oral cancer screening, this is

completely acceptable as long as all the key areas are included.

Areas to be checked in oral cancer screening include:10

- Lymph nodes
- Lips and vestibule
- Buccal mucosa
- Gingivae
- Dorsal and ventral surfaces of the tongue
- Lateral borders of the tongue
- Hard and soft palate
- Oropharynx.

After carefully examining the oral tissues, any abnormalities detected should be noted down and further details should be recorded. This information can be included in a referral should one be warranted and is helpful to have in the notes so any lesions if not being referred can be monitored.

Information to record:

- Site: location in the mouth
- Size: in millimetres
- Appearance: colour and texture
- Feel: firm or soft
- Mobility: fixed to surrounding tissues or mobile
- Pain: yes or no
- Time: how long has this been there
- Changes: has it increased in size.

Signs and symptoms

The first clinically detectable changes which indicate the presence of a potentially malignant disorder include leukoplakia and erythroplakia.12 Leukoplakia presents as a white plaque with uncertain risk, in which other possible causes and diseases should be excluded first. Other white lesions of the oral cavity include pseudomembranous candidiasis, frictional keratosis, lichenoid reactions, lichen planus, leukoedema and white sponge nevus.13 Erythroplakia is a red lesion with a high malignant potential that cannot be attributed clinically or pathologically to another disease. $^{\rm 12}$ A patch which is a combination of red and white in colour is known as erythroleukoplakia and also signifies a lesion with highly malignant potential.

Oral cancers can also take the form of non-healing ulcers which are often fixed and painless with rolled borders, indurated lumps or enlarged lymph nodes.¹⁴

Symptoms to prompt an urgent two week wait referral:¹⁰

- Ulceration or unexplained swelling of the lip or in the oral cavity >3 weeks
- All red, white or mixed red and white patches of the oral mucosa consistent with

- erythroplakia or erythroleukoplakia >3 weeks
- Swallowing difficulties or pain on swallowing >3 weeks
- Pain in the throat lasting >3 weeks
- Persistent hoarseness >3 weeks
- Unexplained tooth mobility not associated with periodontal disease
- Unexplained nerve damage/numbness.

'Improved outcomes for patients with oral cancer rely on early detection'

Referrals

If a patient's symptoms match any of the above and oral cancer is suspected, an urgent two week wait referral should be processed to get the patient an appointment at the hospital as soon as possible. To enable patients to receive an efficient and informed medical appointment it is essential that when making an urgent referral all relevant information is provided.

Information required includes:10

- Patient: title, name, gender, D.O.B, address, postcode, telephone number, their doctors name/address/telephone number
- Dentist: name, practice address, postcode, phone number, GDC number (if not a student), date of referral
- An up-to-date medical history
- Radiographs or photos as appropriate
- Any risk factors
- Clinical presentation, signs and symptoms
- Confirmation that the patient is aware and informed of the need for an urgent two week wait referral for suspected oral cancer.

Raising awareness

Whilst 86% of British adults have heard of oral cancer,² public awareness of the signs, symptoms and risk factors remains poor. This is particularly prevalent in patients with lower education and socio-economic status.¹⁵ Despite the majority of people having heard of oral cancer, many people did not recognise their symptoms to be indicative of the disease and therefore did not get it checked by a medical professional, with many opting to initially selfmanage their symptoms instead.¹⁵

As dental professionals we are in a good position to identify health risks and provide advice and support for patients. It is also important that we actively raise awareness of oral cancer amongst our patients and promote regular check-ups to enable cancer screening.

Ways for students to raise awareness:

- Actively inform patients about the risks of oral cancer and encourage them to ask any questions
- Provide patients with informative leaflets
- Engage in campaigns focused at promoting raising awareness of oral cancer such as Mouth Cancer Action Month (November)
- If you have a dental social media account, promote the importance of regularly attending the dentist for oral cancer screenings.

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