

Why do GDPs fail to recognise oral cancer? The argument for an oral cancer checklist

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IN BRIEF

- Suggests diagnostic delay of oral cancer is potentially modifiable. Considers reasons for this in general practice along with the problems faced by GDPs.
- Discusses the changing epidemiology of oral cancer.
- Stresses traditional risk factors for oral cancer are also changing.
- Proposes the use of an oral cancer checklist in conjunction with ongoing CPD.

Delays in the diagnosis of oral cancer have been the subject of several cases recently reported in the media. Different types of delays include patient delays, doctor delays and system delays. Although diagnostic delays in primary care constitute a minority of these cases they are potentially modifiable and therefore an important aspect of care to address. GDPs need to be aware of several different factors when assessing the risk for oral cancer including the changing epidemiology of oral cancer and new trends in tobacco consumption, for example the increasing use of waterpipes (shishah/hookah). However several problems in fully assessing patients for oral cancer have been reported. These include time constraints, a lack of remuneration and little training in assessing risk factors and conducting a soft tissue examination. This article reviews these issues and puts forward the case for oral cancer detection as a compulsory CPD topic and a national oral cancer checklist as a tool to ensure all aspects of the oral cancer assessment are considered, which can then be audited and remunerated.

INTRODUCTION

The recent case of Richard Law, an accountant who tragically died from oral cancer following a delayed diagnosis, has highlighted several issues for dental professionals. There have also been several other similar cases recently reported in the media, so much so that even dental negligence lawyers have raised concerns about increasing numbers of cases where patients have suffered serious health problems as a result of care failings.¹ Delays in diagnosis of oral cancer have also resulted in several recent GDC fitness to practice hearings.² In light of these trends, the GDC added oral cancer detection as a recommended CPD topic before completion of its CPD review.³ Yet there is still a question which remains unanswered – why do general dental practitioners (GDPs) fail to recognise oral cancer? It is only by answering this question that CPD can be tailored to improving outcomes for patients.

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WHAT IS DELAYED DIAGNOSIS?

A review by the National Patient Safety Agency has developed a working definition of the concept of delayed diagnosis.⁴ It states that delayed diagnosis in cancer is when someone who has cancer (i) is not investigated or referred for investigation; (ii) having been investigated, is not diagnosed at the time of the investigation; (iii) is diagnosed incorrectly; (iv) where a positive test result or diagnosis is not communicated effectively to a clinician with the ability to act on the information; (v) or where a positive test result or diagnosis is not acted upon and treatment commenced as appropriate.⁴

Delays in cancer diagnosis can occur at several different stages. Hansen *et al.* described three overall categories of delay: patient delay, which is the time from when a patient first experiences symptoms to presenting to a healthcare professional; doctor delay, which is primarily a primary care practitioner delay and system delay, which is primarily a hospital or secondary care delay.⁵ This paper will concentrate on the causes of delays in primary care.

WHY IS REDUCING DELAYED DIAGNOSIS IMPORTANT?

The most important prognostic factor in oral cancer is the stage of the tumour

at the time of diagnosis.⁶ This forms a strong argument for reducing any delays in diagnosis so that cancer treatment can be initiated at as early a stage as possible. However, the proliferative activity of the cancer must also be considered as an important confounding factor, as aggressive tumours with a poor prognosis will not usually be associated with diagnostic delay, whereas tumours with low proliferative activity may have a good prognosis despite a long diagnostic delay.⁷

Nonetheless, diagnostic delay is potentially modifiable and therefore should be considered as an area worth investigating further.

THE CHANGING EPIDEMIOLOGY OF ORAL CANCER

The term 'oral cancer' includes cancer of the lip, tongue, mouth, oropharynx, piriform sinus, hypopharynx and other ill-defined sites of the lips, oral cavity and pharynx.⁸ The incidence has been rising steadily since the mid-1970s. In 2009, there were 6,236 new cases of oral cancer in the UK, compared to 3,030 in 1984 and this has been predicted to rise to 9,200 by 2030.⁹ Traditionally oral cancers are associated with older men who smoke and drink alcohol and between 2007 and 2009 an average of 44% of oral cancer was

diagnosed in people aged 65 and above. However, more than 25% were diagnosed in the under 55s, suggesting that the incidence in the younger population is increasing for both sexes, a fact that GDCs need to be aware of.⁸

RISK FACTOR ASSESSMENT AND EXAMINATION

As a multi-factorial disease, there are several risk factors that GDCs need to be aware of and combinations of these increases the risk of oral cancer and pre-cancer. These should be routinely assessed as part of the medical history.

1. Tobacco use: this is a well-established risk factor and practitioners need to ask not just about smoking tobacco, but also smokeless tobacco use, such as chewing tobacco or oral snuff use.¹⁰ Practitioners should also ask about waterpipe (shishah/hookah) use. Studies have shown that waterpipe smokers are exposed to smoke over a longer period of time than a typical cigarette, they may inhale higher amounts of smoke and absorb higher concentrations of the toxins found in cigarette smoke.¹¹ This puts them at risk of the same kinds of diseases as those caused by cigarette smoke such as oral cancer.¹² Worryingly, access to this type of tobacco seems to be growing globally, especially for the 18-24-year-old age group.¹³ However, some patients will not view this as 'smoking' and will not volunteer such information unless specifically asked
2. Alcohol: the effects of a high alcohol intake have been well documented as a risk factor for oral cancer. Combining alcohol and tobacco also has a synergistic effect on the risk of oral cancer.¹⁴ Therefore alcohol intake needs to be assessed in terms of type and quantity
3. Betel quid: chewing betel quid (pan) or areca nut is another established risk factor in oral cancer and is common in South Asian communities. Hence GDCs need to be aware of higher oral cancer risk in ethnic minorities and enquire about such practices¹⁰
4. Age and previous history of oral cancer are other non-modifiable established risk factors that can also be used to assess the risk of oral cancer.¹⁰

There are other possible risk factors for oral cancer but they may be harder for practitioners to assess. These include diet and nutrition as a diet rich in antioxidants can help to prevent cancers. There is also emerging evidence that human papillomaviruses (HPVs) may contribute to the development of oral cancer, especially oropharyngeal cancer.¹⁰

A thorough oral examination and an understanding of the clinical presentation of potential oral cancer lesions are also important facets of detecting oral cancer.

PROBLEMS FACED BY GDCS

A postal survey in Scotland reported several perceived barriers to oral cancer screening. Only 19% of GDCs reported routinely enquiring into smoking habits and 49% did so 'occasionally'. Three percent routinely enquired about alcohol intake, but 68% rarely or never did so. The reasons cited for doing so indicated that they were not comfortable about enquiring about alcohol use. With regards to a thorough soft tissue examination, 41% indicated that a lack of training was an important barrier. Forty-three percent cited time factors as a deterrents and another 40% identified the NHS remuneration system as an issue. Although this study was done in 2003, before the 2006 UDA system, this may still be perceived as a potential barrier to oral cancer screening. Another 31% of respondents also viewed the potential to generate patient anxiety as another barrier.¹⁵

Another literature review on delays in the diagnosis of oral cancer also stated that the initial lesion appearance could lead to delay as early stage tumours led to an increased referral delay since smaller tumours may go unnoticed. It also reported that the location of the lesion can be another potential factor as lesions of the oro-, naso- and hypopharynx are harder to see. Initial mismanagement was another reason for referral delay since as many as 74% of patients in one study were given treatment not related to their malignancy, for example mouthwash, antibiotics, analgesics or tooth or denture adjustment. The appropriateness or accuracy of the referral was cited as another reason for delay as in some cases patients were referred to the wrong specialist.¹⁶

At present opportunistic screening as part of the routine dental check-up is standard

practice in the UK due to a lack of good evidence to support population screening for oral cancer. However, one study that analysed data from two large national surveys showed that those at the greatest risk of oral cancer had a low likelihood of regularly attending for dental check-ups. Therefore those who do attend and undergo screening are at low risk of oral cancer – there is an 'inverse screening law' present.¹⁷ This presents another problem as clinicians will have a low index of clinical suspicion for patients who are deemed to be low risk. This was highlighted by Yu *et al.*, who found that female patients and non-smokers had longer delay periods as clinicians may not be as attentive when examining patients thought to be low risk.¹⁸

RECOMMENDATIONS

Many of these perceived barriers can be reduced by improved training and ongoing CPD, which is now recommended by the GDC. Clinicians need to be aware of the questions to ask to assess risk factors for oral cancer and how to do a thorough visual and digital soft tissue examination. CPD training also needs to include communication skills to alleviate any problems that GDCs may have in handling difficult questions and patient anxiety. Clinicians also need to be aware of NICE guidelines for urgent referrals, how to write referral letters and what the local patterns of referral to hospital specialists are.¹⁰ All of this can be delivered through tailored CPD programmes for all the different members of the dental team.

The National Patient Safety Agency has advocated the development of accessible diagnostic tools for use in primary care⁴ and currently the BDA also produces a 'mouth map' for practitioners to record and describe any pathological lesions.¹⁰ However, some clinicians may feel that there is a lot to remember to do and there may still be problems with time and remuneration.

One solution to these problems may be the use of a checklist. In June 2008 the World Health Organization (WHO) launched an initiative to reduce the number of surgical deaths worldwide. Part of this initiative was use of the WHO Surgical Safety Checklist, which included 19 items and was designed to improve team communication and consistency of care.

Implementation of the checklist was associated with a significant reduction in the death and complication rates in patients undergoing non-cardiac surgery who were over the age of 16 in a range of different hospitals.¹⁹ If a simple checklist can make such a difference in the field of surgery, then perhaps it could also be used in primary dental practice to improve diagnosis and referral of potential oral cancer cases. Such a checklist could include a risk factor assessment and a list of soft tissue sites within the mouth for clinicians to examine. The NICE guidelines could also be incorporated within the checklist so that GDPs can be confident of an appropriate referral. Guidelines for follow up of patients at risk can also be included to ensure continuity of care. A checklist is something that could also be easily audited and therefore remunerated as part of the new dental contract.

CONCLUSION

In summary, GDPs perceive that there are several challenges in assessing patients for oral cancer. Many of these problems could be reduced by training as part of CPD for all members of the dental team. The development and use of an oral cancer checklist as an accessible diagnostic primary care

tool is something that could also improve outcomes for patients.

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