

# Analysis

## Building bridges with dentistry:

NICE guideline supports collaborative practice between GPs and dentists

### INTRODUCTION

The title of this article may suggest a discussion surrounding missing teeth and intra-oral prosthetics. However, this article is intended to discuss a broader topic, one that has gained increased coverage across academic journals in recent years: the integration of oral health into primary care.

The integration of oral health into primary care is still a relatively new initiative worldwide. In the US, the American Academy of Family Physicians (AAFP) has shown its support for a new model of care that promotes the integration of oral health into primary care. This model was outlined in the Oral Health Delivery Framework (OHDF).<sup>1</sup> The OHDF aims to support GPs to incorporate some oral health practices such as: promoting oral health, identifying risk factors for oral disease, providing patient education, and developing referral networks to support collaborative practice with dentists.<sup>1</sup> The potential benefits of collaborative practice are perhaps most pertinent among specific populations such as children, pregnant women, older adults, and people with chronic systemic diseases, for example diabetes.<sup>1</sup>

In the UK, previous studies have suggested that GPs and dentists should collaborate more to improve the early detection of oral squamous cell carcinoma (OSCC).<sup>2-3</sup> It has been shown that patients who have regular dental check-ups are more likely to have OSCC diagnosed at an earlier stage.<sup>4</sup> However, only 50.4% of the UK adult population was seen by an NHS dentist in the 24 months prior to 1 December 2018.<sup>5</sup>

*"The ability of health professionals to reliably diagnose oral disease depends on their training ..."*

Data from two large national surveys in the UK showed that the 'inverse screening law' applies to OSCC, and that there was a lower probability of regular dental check-ups among those with a greater risk of OSCC.<sup>6</sup> In keeping with the OHDF model,<sup>1</sup> a study of hospital-based dentists and dental specialists suggested that GPs may be in a position to improve the regularity of dental check-ups, specifically by identifying patients with a greater risk of OSCC, educating patients of their increased risk, while also encouraging and/or facilitating a dental check-up.<sup>7</sup>

The National Institute for Health and Care Excellence (NICE) guideline *Suspected Cancer: Recognition and Referral* also suggests collaborative practice between GPs and dentists, explicitly in the context of an identified oral lesion in primary care (Box 1). The guideline recommends an 'urgent referral to a dentist for assessment' for possible oral cancer for patients who have either 'a lump on the lip or in the oral cavity' or 'a red or red and white patch in the oral cavity'.<sup>8</sup> However, a recent review that examined the unique nature of the NICE guidance for a cross-primary care referral suggested that patients referred to a dentist by their GP under this guideline may be exposed to an increased risk of delayed

referral and diagnosis of OSCC.<sup>9</sup> According to the NICE guideline, the only other alternative would be a 'suspected cancer pathway referral' to secondary care, which is recommended for the more malignant-sounding clinical descriptions, and this would mean that the patient would need to be seen within 2 weeks of the referral, thus placing a greater burden on secondary care services.<sup>8</sup>

The purpose of this article is to support the tiered approach taken by the NICE guideline in the assessment of oral lesions in primary care, as it provides sensible instruction for GPs to gain a second opinion from dentists for the more benign-sounding clinical descriptions, which may then avoid the need for secondary care referral.

### THE SPECTRUM OF ORAL DIAGNOSES AND THE DIAGNOSTIC DILEMMA POSED IN PRIMARY CARE

The oral mucosa has a limited repertoire of responses to disease, and a broad spectrum of diagnoses may present as lumps, ulcers, and red or white patches.<sup>10-11</sup> An analysis of 44 007 oral biopsies submitted to an oral pathology service in the UK over a 30-year period presented 393 different diagnoses. Admittedly, the 20 most frequent diagnoses represented 32 616 biopsies, almost 75% of the overall total. Among this 75%, several benign diagnoses would fit the clinical description stated in the NICE guideline of 'a lump on the lip or in the oral cavity', such as fibrous hyperplasia, squamous papilloma, fibrous epulis, pyogenic granulomas, and different types of salivary gland cysts.<sup>10</sup> Education and training on the recognition of the aforementioned diagnoses, in addition to other diagnoses that would fit the clinical description of 'a red or red and white patch', are included as part of a robust curriculum in oral medicine for dental students in the UK. This curriculum sets a training standard that must be met for dental graduates to be successfully admitted to the Dental Register in the UK.<sup>11</sup> It is worth noting that in the analysis of 44 007 biopsies, in accordance with the stated training standard, dentists should be able to recognise the majority of

#### Box 1. NICE guideline *Suspected Cancer: Recognition and Referral* — oral cancer<sup>8</sup>

Consider a suspected cancer pathway referral (for an appointment within 2 weeks) for oral cancer in patients with either:

- unexplained ulceration in the oral cavity lasting for more than 3 weeks; or
- a persistent and unexplained lump in the neck.

Consider an urgent referral (for an appointment within 2 weeks) for assessment for possible oral cancer by a dentist in patients who have either:

- a lump on the lip or in the oral cavity; or
- a red or red and white patch in the oral cavity consistent with<sup>9</sup> erythroplakia or erythroleukoplakia.

Consider a suspected cancer pathway referral by the dentist (for an appointment within 2 weeks) for oral cancer in patients when assessed by a dentist as having either:

- a lump on the lip or in the oral cavity consistent with oral cancer; or
- a red or red and white patch in the oral cavity consistent with erythroplakia or erythroleukoplakia

<sup>9</sup>The finding has characteristics that could be caused by many things, including cancer.

“... utilis[e] the entire skill-set of the primary care team prior to determining the need for secondary care referral for oral lesions.”

the diagnoses, make a clinical diagnosis, and potentially avoid the need for a biopsy at all, thus limiting the number of onward referrals to secondary care.<sup>10-11</sup>

The ability of health professionals to reliably diagnose oral disease depends on their training, and the NICE recommendation to refer a patient to a dentist may not be necessary if GPs and dentists were afforded the same training in oral health and disease.<sup>11</sup> Results from a recent nationwide cross-sectional survey in the UK identified significant gaps in the training of GPs in relation to oral health and the detection of oral disease.<sup>12</sup> Another study from the UK showed that among a cohort of 228 GPs, 97% had never received training in how to screen the oral cavity for oral mucosal disease, including OSCC.<sup>2</sup> In the absence of oral health training, it would be unfair to expect GPs to examine the oral cavity and reliably diagnose oral disease.<sup>7</sup> In acknowledgement of the paucity of oral health training received by GPs, and the broad spectrum of oral diagnoses that would fit the clinical description of either ‘a lump on the lip or in the oral cavity’ or ‘a red or red and white patch in the oral cavity’,<sup>10-12</sup> the NICE recommendation to refer to a dentist ensures a second layer of assessment from within the primary care team, thus potentially reducing the amount of referrals to secondary care.

A study that examined the application of the existing NICE guideline in comparison with the previous NICE guideline showed that nine out of 25 patients meeting the criteria of both guidelines would have required referral to a dentist under the existing guideline. Of these nine patients, only one patient was subsequently diagnosed as OSCC. Of the remaining eight patients, it is possible that secondary care referral could have been avoided, and instead dentists could have assessed these patients in primary care.<sup>13</sup>

In the US, the AAFP supports the OHDF recommendation to develop ‘primary care–dentistry referral’ networks as a way to enable GPs to facilitate timely access to dentists with greater confidence.<sup>1</sup> Unlike in the US, patients in the UK, rather enviably, are able to access a dentist for an assessment free of charge through the NHS. This is all that the NICE guideline recommends: ‘referral to a

dentist for assessment’ for oral lesions that fit the aforementioned descriptions.<sup>8</sup> This type of GP-led referral may also influence a patient’s future engagement with dentists thereafter,<sup>7</sup> which could potentially increase regular dental attendance in the UK,<sup>4</sup> an outcome that has been shown to improve the earlier detection of oral lesions such as OSCC.<sup>4</sup>

Developing ‘primary care–dentistry referral’ networks need not be a complicated upheaval of general practice, but simply entail identifying a local dentist or dental practice and establishing a professional relationship to support effective communication and teamwork thereafter. This could be done at an individual level or at a group practice level.<sup>1</sup> We suggest that the recommendation for collaborative practice between GPs and dentists, as per the NICE guideline,<sup>8</sup> is a sensible way of ‘building bridges with dentistry’, thus utilising the entire skill-set of the primary care team prior to determining the need for secondary care referral for oral lesions.

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