

cancer. The authors found a lack of research in this area with only 16 studies which focused on oral squamous cell carcinoma diagnosis, six of them from the UK.²

In the UK, more than 55% of patients with oral cancer were referred by their GP and 44% by their dentist. On average, patients had two to three consultations before they were referred to a specialist and delays were similar whether patients initially saw a GP or a dentist, although one study found greater delays attributed to dentists as they had undertaken dental procedures.²

There was no information on inter-GP-dental referrals as recommended in the guideline from the National Institute for Health and Care Excellence (NICE).^{2,3}

The authors of this systematic review concluded that there was no evidence that GPs performed less well than dentists, which calls into question the NICE cancer option to refer to dentists, particularly in the absence of robust auditable pathways.^{2,3}

C. A. Yeung, by email

1. British Dental Association Scotland. Oral cancer – A plan for action. 2018.
2. Grafton-Clarke C, Chen K W, Wilcock J. Diagnosis and referral delays in primary care for oral squamous cell cancer: a systematic review. *Br J Gen Pract* 2018; DOI: 10.3399/bjgp18X700205.
3. National Institute for Health and Care Excellence. Suspected cancer: recognition and referral. Last updated 2017. Available at <https://www.nice.org.uk/guidance/ng12> (accessed on 2018).

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Oral cancer detection

A digital diagnostic test for oral cancer

Sir, I have read with considerable interest the Opinion paper by Brocklehurst and Speight on screening for mouth cancer.¹

One of the most challenging aspects of cancer management is predicting whether or not lesions will develop to cancer. The majority of oral potentially malignant disorders are benign; the difficulty comes when differentiating premalignant/malignant lesions from benign lesions with a similar appearance.

As the authors highlight, there is a strong need for a diagnostic test using biomarkers, especially given the recognised problem that histopathology is unable to detect early malignancy and is liable to subjectivity.²

In view of the comment that no molecular biomarkers have yet been shown to have utility in screening trials, it is worth

highlighting a biomarker array that has been developed to objectively detect precancerous cells in patients with benign-looking oral lesions. The quantitative Malignancy Index Diagnostic System (qMIDS)³ converts the total expression of a specific set of genes via a diagnostic algorithm into a metric ‘malignancy score’.

By quantifying the risk of a given oral biopsy becoming cancerous, it enables reassurance of those patients with low cancer risk and a reduced need for their intensive surveillance, whilst identifying those at high risk and ensuring earlier detection and treatment.

If we are to improve the five-year survival rate for mouth cancer, early detection is key. Diagnostic tests will need to be specific, rapid, quantitative and objective if we are to move away from ‘watch and wait’ approaches.

J.-Y. S. Yeung, by email

1. Brocklehurst P R, Speight P M. Screening for mouth cancer: the pros and cons of a national programme. *Br Dent J* 2018; **225**: 815–819.
2. Kujan O, Khattab A, Oliver R J, Roberts S A, Thakker N, Sloan P. Why oral histopathology suffers inter-observer variability on grading oral epithelial dysplasia: an attempt to understand the sources of variation. *Oral Oncol* 2007; **43**: 224–231.
3. Teh M-T, Hutchison I L, Costea D E *et al*. Exploiting FOXM1-orchestrated molecular network for early squamous cell carcinoma diagnosis and prognosis. *Int J Cancer* 2013; **132**: 2095–2106.

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Infant oral mutilation

A response to the subject – ‘Infant oral mutilation’

Sir, we read with interest the letter by Bibi, Dixon and Barry titled ‘Cultural impact on dental care’.¹

Infant oral mutilation (IOM) is a barbaric ritual practice in some parts of Africa that can result in fatality, systemic as well as dento-alveolar complications.²

Unexplained dental anomalies, particularly affecting the canines, as a result of IOM may vary in clinical presentation and hence awareness of this grossly under-reported practice is an integral part of clinical diagnosis and safeguarding children.

In the UK, IOM, unlike female genital mutilation (FGM) is not unlawful. Reported cases of IOM have been evidenced in UK-born children with immigrant Africa mothers who did not speak English and were living within rural and less educated communities.³

It is important to highlight, similar to FGM, IOM continues outside of the native settlement among isolated minority African refugee communities in the developed world as they knowingly encourage this deep-rooted superstitious belief. The lack of awareness of IOM among dental and medical professionals is high due to limited literature and publicity.

It is important to recognise contributing factors amongst these sociodemographic groups may include distrust in Western medicine, stress of migration which can cause depression and reduction in self-confidence, isolation, personal and family crises, language barrier and lack of access to the National Health Service (NHS).

A sensitive and informed approach to communication and education by trained and skilled counsellors with an in-depth understanding of African cultures is crucial in dealing with traditional beliefs and practices.

From a social and ethical perspective, legal ramifications similar to FGM, could be considered in the UK as a deterrent for those individuals who incite, allow, or, themselves take part in this mutilating superstitious practice.

It is now widely acknowledged that FGM is an illegal practice. The Prohibition of Female Circumcision Act was first imposed in 1985 with further legislations in 2003 and 2005 making it a criminal offence to arrange for such a practice outside the UK.

Most recently, the UK government pledged £50 million, the biggest single investment worldwide to date, to help eradicate FGM in Africa. With increased awareness and reporting of IOM among dental and medical professions, we hope that IOM will attract similar publicity and help from the government to end IOM in Africa.

In the meantime, when dental professionals suspect possible planned IOM to be carried out in parents’ native countries, it should be managed according to the child’s safeguarding policies.

S. Girgis and L. Cheng, by email

1. Bibi A, Dixon C, Barry S. Cultural impact on dental care. *Br Dent J* 2018; **225**: 793.
2. Girgis S, Gollings J, Longhurst R, Cheng L. Infant oral mutilation – a child protection issue? *Br Dent J* 2016; **220**: 357–360.
3. Rodd H D, Davidson L E. ‘Ilko dacowo’: canine enucleation and dental dequelaie in Somali children. *Inter J Paed Dent* 2000; **10**: 290–297.

DOI: 10.1038/sj.bdj.2019.142