

## COMMENT

# Letters to the editor

Send your letters to the Editor, British Dental Journal, 64 Wimpole Street, London, W1G 8YS. Email [bdj@bda.org](mailto:bdj@bda.org). Priority will be given to letters less than 500 words long. Authors must sign the letter, which may be edited for reasons of space. Readers may now comment on letters via the *BDJ* website ([www.bdj.co.uk](http://www.bdj.co.uk)). A 'Readers' Comments' section appears at the end of the full text of each letter online.

## OMFS

### Seven day services

Sir, our department has recently audited the 'seven day service' provision for the acute surgical OMFS cases that we currently deliver. We believe this highlights the important contribution that junior (dental) core trainees make in providing 'round the clock' care.

For this, we defined the 'week' as commencing from 8 am Monday until 8 pm Friday, and 'weekend' as 8 pm Friday until 8 am Monday.

For all acute OMFS patients admitted through the Accident and Emergency department during the 'week' compared with the 'weekend', there was no significant statistical difference with 'time to treat', ie from time of A&E attendance to operation time in theatre.

This was shown in the 102 consecutive clinical cases studied, requiring admission and acute surgical care. Those cases admitted at the 'weekend' requiring treatment were on average treated 2 hours 19 minutes faster than during the week in cases for acute fractures of the mandible. This is also reflected in those patients with cervicofacial infections as noted (Fig. 1).

We believe this highlights the importance of a dedicated OMFS team comprising of junior OMFS doctors, middle grades and consultants alike. Our department is in a large teaching hospital, and it is only with the valued contribution from our junior (dental) core trainees that this vital 24/7 service provision can occur.

We would suggest that this also provides considerable clinical experience 'out of office hours' which should be remembered in any discussions related to future training and education of our core trainees.

C. Mannion, D. Tyler, Leeds Teaching Hospitals NHS Trust

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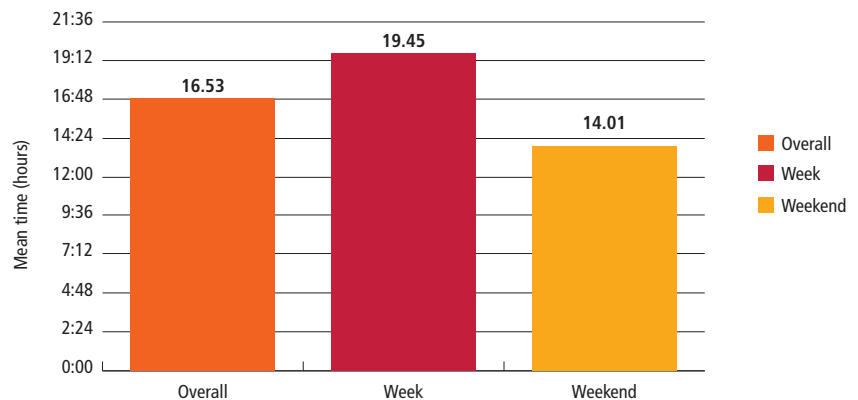


Fig. 1 Mean time from A&E attendance to theatre for cases for incision and drainage

## Brexit

### Implications for tooth whitening

Sir, we are writing with regard to Brexit and the implications on clinical dentistry. One piece of legislation of particular interest to paediatric dentistry is the EU Cosmetic Directive 2011/84/EU<sup>1</sup> which came into force in the UK in October 2012 and banned the use of products containing >0.1% hydrogen peroxide on persons under 18 years old. Dentists see children with dental anomalies including discoloured teeth; such anomalies have been reported to affect children's psychosocial health;<sup>2</sup> tooth whitening in such children and young people is not simply for cosmetic purposes. After much lobbying by UK dentists, including the British Society of Paediatric Dentistry, the General Dental Council amended its guidance and advised that products with ≤6% hydrogen peroxide can be used if 'intended wholly for the purpose of treating or preventing disease'.<sup>3</sup>

However, the ethical and legal conundrums for the dentist remain. The EU Cosmetic Directive has not changed despite the GDC's statement. The dentist who acts in a child's best interest might still

be at risk of legal persecution by the local Trading Standards officers. The maximum penalty of breaching the law is six months imprisonment.

In addition, interpretations of the GDC's guidance have been different. While one major UK defence organisation is supportive of a dentist's decision to provide tooth whitening for those under 18 years of age based on individual assessment,<sup>4</sup> another UK defence organisation stated that they 'cannot envisage any circumstance where the product could be used 'wholly for the purpose of treating or preventing disease'.<sup>5</sup>

Therefore, the dental profession should continue to lobby to ensure that the legislation permits dental professionals to do what is best for their patients without ambiguity.

R. Yee, V. Wong, London

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**Oral cancer**  
**Breath of death**

Sir, yet another patient presented late to our outpatient service with a large oral growth. Questioning confirmed early self-detection several months previously. Late diagnosis of malignancies in developing nations is due to limited access in rural areas to biopsy services. Anecdotal discussion with colleagues confirms a ‘breath of death’, a peculiarly pungent halitosis noted in the breath of oral malignancy patients. Our hypothesis is that the genetic makeup of tumours and their distorted molecular pathways lead to synthesis of unique proteins that generate ‘signature odours’. If this were true, a paradigm shift in early detection of malignancies might rely not on visual detection but on analysis of patients’ volatile molecular samples. The keen sense of smell of dogs is already used for detection of narcotics and explosives; pattern analysis to detect malignancies in this manner has been demonstrated.<sup>1</sup>

Reverse engineering of biological olfactory mechanisms and pathways may improve

electronic olfaction to enable reliable diagnostics.<sup>2</sup> It is not impossible to imagine a future where a compact, affordable electronic olfaction module plugs into a clinician’s smartphone enabling odour analysis even at locations remote from healthcare facilities (Fig. 2). Algorithms comparing detected molecules with online databases of ‘olfactory signatures’ would suggest a mathematical probability of oral malignancy. Animals’ reliance on olfaction to detect prey, predators and mates hints at the potential sensitivity and specificity of electronic olfaction.

The non-invasive quality of odour analysis promises speed, painlessness and affordability. Apart from malignancies, odour analysis might help to detect even metabolic disorders in the doctor’s office. Even while writing this letter, news has emerged that malaria could be diagnosed by a breath test. We anticipate this to be a future path of research in computational biology. Odours have never been more exciting for life sciences; clinicians of yore would be surprised and pleased at such emerging new diagnostic tools.<sup>3</sup>

N. Uppal, P. Singh, India

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**Khat and cancer**

Sir, we read the letter *Oral health: The destructive effects of khat* by Dr Marway.<sup>1</sup>

Dr Marway has observed destructive effects of khat on oral health in habitual khat chewers but it can be attributed to consumption of high sugar drinks and sugar tablets to counteract the bitter taste. It was observed by W. Luqman and T. S. Danowski that dental cavities are rare in Yemen when khat chewing people are not consuming sugar sweetened beverages.<sup>2</sup> There is a correlation between habitual khat chewing and oral cancer.<sup>3</sup> Oesophageal and gastric carcinoma have been observed in khat chewers in both men and women in Yemen.<sup>4</sup> There is evidence connecting khat chewing to genetic damage of the oral mucosa and cancer.<sup>5</sup>

Mahantayya V. Math,  
Yashoda R. Kattimani, India

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**Dental education**  
**Mobilising resources**

Sir, I refer to the letter published in June<sup>1</sup> and the proceedings of the lower house of Indian Parliament on 19 July 2016 regarding the issue of unemployment among Indian dental graduates.

On 19 July 2016 Dr Retna De Nag, a member of the Indian Parliament (MP), a doctor by profession, raised the issue of acute unemployment among new Indian dentists in a speech in the lower house.<sup>2</sup> She spoke of the 309 dental colleges in India that produce about 36,000 dental graduates every year compared to 8,000 in 1970, pointing out that the real issue is due to this mushrooming of dental colleges about which the Dental Council of India (DCI) had done nothing. She accused the DCI of failing miserably in performing its primary function and said that the regulator should have acted in time to adjust the availability of dentists dependent on demand.

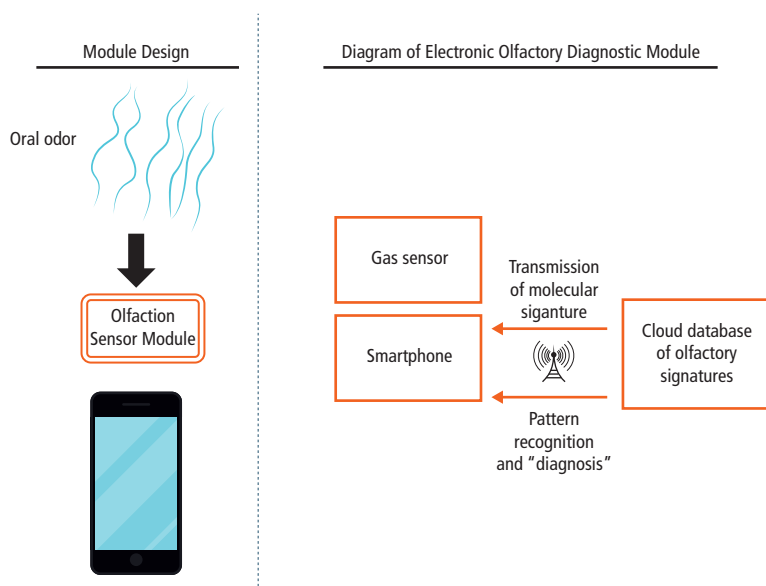


Fig. 2 Diagram of electronic olfactory diagnostic module